ERIC Document Resume	See Instruction Sheet	DATE OF RESUME	DATE RECEIVED

A. PUBLICATION DATA

1. ERIC NUMBER ED001322	2. ORIGINATOR CONTROL NO(S). N.A.	3. IDENTIFICATION NO. N.A.

4. AUTHOR(S): Hansen, William, et al

5. TITLE OF DOCUMENT ABSTRACTED: The More Capable Learner, Grade Five

6. PUBLICATION TITLE: N.A.

7. EDITOR(S): N.A.

8. PLACE OF ORIGIN

More Capable Learner Comm.
ORG.
Fresno City Univied School
ST.
District, Fresno, Calif.
CITY, STATE
TELE. EXT.
INST/LOC CODE

9. PUBLISHER OR SOURCE Fresno City Unified School District; Fresno, California

10. VOL.	11. PAGES	12. MO./YR.	13. TOTAL PP.
N.A.	N.A.	N.A.	123

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TYPE OF REPORT
- PROPOSAL ☐
- IN-PROGRESS ☐
- FINAL ☒
- FOLLOW-UP ☐

OTHER ERIC REFERENCES:

ERIC SATELLITE CODE

B. INDEXING DATA

14. SUBJECT AREA

15. TYPE OF ENDEAVOR teachers' guide

16. INDEXING TERMS (6-12)

		music	grade five	
elementary education	teacher education	reading		
curriculum	arithmetic	science		
units of study	language arts	social studies		

17. ABSTRACT (MAX. 250 WORDS)

Enriched activities developed by teachers are listed in overlapping subject areas. Materials, games, and exercises in arithmetic, language, music, reading, science, and social studies are also listed. Examples are: 1) an outline classifying an insect and observing its habits, 2) arithmetic problems to develop logic in solving word problems, 3) a game to develop vocabulary: "Ask Mr. Webster," 4) phonetic paragraphs to develop reading skill, 5) a game matching composers and their biographies. Aids for identifying the more able student are also included.

ERIC No.

18. SOURCE OF ABSTRACT

C. FUNDING DATA

19. SUPPORTING ORGANIZATION

20. DIVISION OR DEPT.

21. CONTRACT NO.

PROJECT NO.

22. TOTAL COST OF PROJECT

23. DURATION OR PROJECT

U.S. Department of Health, Education, and Welfare
Office of Education

ERIC Form 1

TD

E22

ED001322

MCL

THE MORE CAPABLE LEARNER

GRADE 5

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Fresno City Unified School District
Fresno, California

FOR THE
MORE CAPABLE LEARNER

Grade 5

This collection of materials developed by teachers is an instructional aid to assist the teacher in providing enrichment activities for the more capable learner.

Developed by
More Capable Learner Committee

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2. Language
3. Music
4. Reading
5. Science
6. Social Studies

Answer sheets

SUGGESTIONS FOR USING PUPIL MATERIALS

1. Make the materials accessible to all pupils.

2. Stimulate interest by displaying activity sheets in boxes in front of a suitable bulletin board.

3. Display several sheets on various topics at one time. Change often.

4. Explain use of materials to all pupils. It is important that students know what materials are available, how these materials are to be used and when they may use them.

5. Allow pupils to correct their own work. Teachers may check over the work if they so desire.

6. Provide some type of record keeping. Card files or check sheets work well.

7. Set aside some time each week for students to report their accomplishments to the class. A regular check-up time is important to the success of this project.

8. Student worksheets should be mounted on tagboard or construction paper to make them last longer. Transparencies may be clipped to the worksheets to protect them.

9. All materials should be turned in to the building principal at the close of the school term and checked out to teachers in the fall.

CHARACTERISTICS OF THE MORE ABLE STUDENT*

High Academic Achievement (1, 3-5, 7-10, 12, 13)

The more able student shows as much unevenness in subject matter abilities as do other children, but his overall grade point average is usually high and is the best single predictor of college success. He requires less detailed and fewer repeated instructions, often anticipating them. He works readily with symbols such as words and numbers, in place of direct experience and the actual objects.

Advanced Vocabulary and Reading Level (1, 3-5, 7-10, 12, 13)

The more able student has a large vocabulary which he uses easily and accurately. He retains what he has heard or read without much rote or drill. He can read books that are one to two years in advance of the rest of the class. He usually reads at an early age.

Expressive Fine Arts Talent (1, 4, 5, 7-10, 12, 13)

The more able student's wide range of interests stems from his vivid imagination. He is able to solve problems in aesthetic fields and can visualize actions and things from descriptions. He frequently creates original stories, plays, poetry, tunes, and sketches. He can use materials, words, or ideas in new ways.

Wholesome Personal-Social Adjustment (1, 4, 5, 7-10, 12, 13)

The more able student adjusts easily to new associates and situations. He is alert, keenly observant, and responds quickly. He possesses a keen sense of humor and incorporates suggestions from others into his own thinking and actions. His companions are often one or two years older but they recognize his superior ability in planning, organizing, and promoting. He also displays evidence of emotional stability in ordinary behavior.

Early Physical Competence (1, 3, 5, 8-10, 12, 13)

The more able student is characterized by his early physical development. He has a tendency to be taller, heavier, and has fewer physical defects. Not only does he enjoy outdoor games preferred by average children, but tends to excel in these games. He usually enjoys superior health and, as a result, has fewer absences from school due to illness. He also possesses especially good eye-hand coordination.

Superior Intellectual Ability (1, 4, 8-10, 12)

The more able student exhibits superior ability in reasoning, generalizing, thinking logically, and comprehension. He is able to perform highly difficult mental tasks and to learn more rapidly and more easily than most children. This child also has a longer concentration span and is keenly aware of the processes of his environment.

---

* The More Able Student by Ernest O. Buhler and Eugene N. Guirl, Vocational Guidance Quarterly Vol. 8, No. 4

Characteristics of the More Able Student (continued)

Effective Independent Work (1, 7-10, 12, 13)

The more able student displays his competence for effective independent work by criticizing himself and modifying his behavior accordingly. He possesses superior insight into problems, is not easily influenced, and is less prone to change his mind once an opinion is formed. His effectiveness is also displayed by applying learning from one situation to more difficult situations.

Persistent Curiosity (1, 3, 7, 9, 10, 12)

The more able student displays a deep seated interest in some subject or field. In an attempt to gratify this insatiable curiosity he may display a dislike for rote memory and busy work. He also enjoys using encyclopedias, dictionaries, maps, globes, and other references.

Strong Creative and Inventive Power (1, 4, 5, 8, 10, 12)

The more able student possesses high-powered intellectual curiosity, imagination, and creativity. He has unusual power to see new structures and processes and to express his vision in speaking, writing, art, music, or some other form. His work has freshness, vitality, and uniqueness. An individual may create new ideas and substances or he may invent and build new mechanical devices. He sometimes runs counter to tradition and is continually questioning the status quo. He may do the unexpected.

Special Scientific Ability (1, 4, 5, 8, 10, 12)

The more able student with scientific talent will use the scientific method of thinking. He will employ scientific research methods and will grasp scientific concepts in short periods of time. He will display a curiosity of the natural world. He is not easily discouraged by failure or experiments or projects and will seek causes and reasons for things. He will spend much time on special projects of his own such as making collections, constructing radios, and making electronic computers.

High Energy Level (1, 7, 9, 10, 12)

The more able student displays a high level of energy. He keeps active by undertaking and completing task after task. He participates in various extra-curricular activities, holding leadership roles in many, and frequently concentrates on long range, unattainable and poorly defined goals.

Demonstrated Leadership Ability (4, 5, 10, 12)

The more able student displays an ability to help a group reach its goals. He often will improve human relationships within a group and will achieve prominence by individual effort. He enters into activities with enthusiasm and is able to influence others to work towards desirable or undesirable goals. He can take charge of the group.

Well-Developed Mechanical Skills (4, 5, 10)

The more able student who possesses mechanical ability may be identified by unusual manipulative skills and spatial ability. He perceives a visual pattern complete with details, similarities, and differences. He excels on craft projects and is interested in mechanical gadgets, devices, and machines. He comprehends mechanical problems and puzzles and likes to draw plans and sketches of mechanical objects.

Department of Guidance and Testing

CHECKLIST FOR IDENTIFYING THE MORE ABLE STUDENT*

Name ______________________________ School ______________________________

Age: Years ______________ Months ______________ I.Q. ______________

Place a check mark (✓) on the scale at a point where you think the pupil under consideration rates in the characteristics named. Please make your estimate in relation to all other pupils in this age group.

High academic achievement LOW 2 3 4 HIGH

Advanced vocabulary and reading level ______________________________

Expressive fine arts talent ______________________________

Wholesome personal-social adjustment ______________________________

Early physical competence ______________________________

Superior intellectual ability ______________________________

Effective work independently ______________________________

Persistent curiosity ______________________________

Strong creative and inventive power ______________________________

Special scientific ability ______________________________

High energy level ______________________________

Demonstrated leadership abilities ______________________________

Well-developed mechanical skills ______________________________

---

* Taken from The More Able Student
by E. O. Buhler and E. N. Guirl,
Vocational Guidance Quarterly,
Vol. 8, No. 4

M.C.L. ACTIVITIES CHART*

MUSIC-RHYTHMS	ARTS AND CRAFTS	
Study the foreign words used in musical notation. Read life stories of musicians. Dramatize stories portrayed in music. Listen to an opera. Report to class, using story of the opera. Write songs or poems. Set them to your own music. Organize a verse choir. Read poetry or prose aloud with a musical accompaniment.	Make charts with pictures to illustrate rules of grammar. Mount picture. List parts of speech found in it. Give it a title. Write a story and use some of the nouns, verbs, adjectives identified. Describe how certain pictures make you feel--in poetry or prose. Read stories of artists and master works. Interview local artists, sculptors, etc., by phone. Ask for a field trip to museum, art center, photography studio, advertising agency. Make book covers or folders for clippings, etc.	LANGUAGE ARTS
Make an illustration of the relationship of time notations in music to fractions. Use a metronome to compare speed, to show time variations of timetable, to establish a rhythmic pattern, to create a simple dance. Show that syncopation is a kind of arithmetic problem. Figure the cost to the school of an orchestra, band, chorus; include uniforms, instruments, music, etc.	Create patterns and designs with geometric figures. Make snowflake designs. Make scale drawings. Study some phase of architecture--blue-prints, landscape design, stresses and strains of building supports, areas, floor space ratio to window area. Figure amount of materials needed for class use of finger paint, clay mixes, etc. Study formulae used in mixing color chemicals for ceramics.	ARITHMETIC
Demonstrate different types of music from other parts of the world or other areas of this country. Make a collection of different types of songs, such as work songs, home songs, patriotic, love, and blues songs. Create a folk song based on an old folk tale. Show how the dances of the world affect our modern dances. Make a collection of rhythms used for folk dancing. Learn to do folk dances of the areas studied, giving attention to authentic costumes, etc.	Show how climate and environment affect the arts and crafts of the people. Design and decorate rooms in a home. Make a model of a home. Make tiles using designs of pioneers. Draw a family tree; put in as much geneology as you can. Make a book-plate for the family library. Collect pictures of the areas studied. Display them around the room and building. Weave, spin, dye, work in clay, and do other pioneer handicraft. Draw pictures, murals to illustrate plans of social studies. Make maps (use many different media).	SOCIAL STUDIES

*Adapted from the Portland Plan For More Capable Learners

MORE CAPABLE LEARNER ACTIVITIES LISTED IN OVERLAPPING SUBJECT AREAS

SOCIAL STUDIES	SCIENCE	
Write letters for specific information about news stories. Interview resource persons in person or by phone. Make written or oral reports on things that interest you. Listen to conversational Spanish, French, German, etc., records. Make a vocabulary chart for the class of foreign words or phrases used daily. Write stories or plays. Keep news-clipping file by subject. Collect clippings and pictures of subject you are interested in. Lead discussion groups.	Keep science diaries--"Birds I Have Identified," etc. Build specific vocabulary from prefixes and suffixes and word beginnings. Make reports of field trips to other classes. Interview resource people in person or by phone. Write radio scripts, stories, poems, TV scripts, etc. Relate the scientific method to the development of good study habits. Read biographies of great scientists, doctors, nurses, public health pioneers. Keep health-diary, record changes in weight, height, girth, etc. Arrange phone conference with a scientist you know. Follow one problem or curiosity to an answer each day.	LANGUAGE ARTS
Study foreign exchange. Study different methods used in Europe. Compute costs of trips from schedules. Using map, figure mileage for imaginary class trips. Use scale drawings. Construct models of homes or areas studied. Compute altitudes using surveyors' instruments. Make a graphic illustration of time zones across the nation.	Study system of measures. Learn how standards are set and maintained. Find uses for geometric figures in science. Learn to use computers. Visit office where IBM machines are used. Keep graphic record of rainfall, weather, barometric readings, wind velocity. Make problems about building a house. Learn to compute board feet. Study simple geometry and learn to compute the height of objects. Measure and record shadows--A.M., noon, P.M.	ARITHMETIC
Extension Make use of reference books, diaries, biographies, resource persons, and fugitive materials for extensive study of chosen area. Keep bibliographies of each area studied: Using filing cards and keep a permanent file for own use or for the use of other pupils. Study local, state and county history. Make scrapbook--homes, communites, shelter, transportation, food, etc. Make collections--pictures, clothing, materials, building materials, foods. Interview adults for historical information. Mount current events--locate on map.	Study different bird routes and migratory phenomenon. Show how each large area and each state has its own particular conservation problems. Study insurance policies which provide protection against storms, etc. Study insect, pest and plant disease controls and show how the different states are protecting their crops by enforcing strict border regulations. Read about the water divining rod and other superstitions. Study lightning tamers. Study rain makers in dry areas.	SOCIAL STUDIES

LANGUAGE ARTS	ARITHMETIC	
Extension Write plays, stories, poetry, diaries. Make spelling lists--homonyms, synonyms, antonyms. Study dictionary for derivation of words. Make Story Starter file. Study advertisements. Write pros and cons. Make bibliographies. Do research. Write or read biographies to class Who's Who? Report orally. Read to class. Develop class newspaper. Make scrapbook of readings--records. Plan special day programs. Dramatize stories. Direct plays. Make dictionaries. Use thesaurus.	Read about history of numbers. Add words to reading and speaking vocabulary. Make oral and/or written reports on special math research. Operate school store. Practice being a salesman. Interview local storekeepers. Write reports, advertisements, etc. Write evaluation of experiences.	LANGUAGE ARTS
Interview persons in industry and business to show need for good foundation in understanding of number facts. Write a play using numbers as characters. Dramatize lives of great mathematicians. Keep an arithmetic vocabulary list.	Extension Study other bases for numbers, 8, 10, etc. Keep temperature record. Work out algebraic formulae for various problems. Create number games to help the slow learner. Make fraction picture-charts. Keep a percentage-rating chart of batting averages of national ball players, class, or school team. Demonstrate new methods of learning the arithmetic facts by using such devices as Stern's number board, etc. Practice oral number games. Make budget. Study number systems.	ARITHMETIC
Make charts, lists, or write about our dependence upon other countries for daily activities and supplies. Begin with breakfast; bananas, cocoa, etc.--include the things we use at school such as the rubber in erasers, medical supplies, etc. Have dramatic play of historical events. Make oral reports on history, culture, ways of life. Make booklets--mottoes of states, lives of famous people, birthdays of famous people. Spell names of holidays. Write what each letter might stand for. Group pantomime situation for class to write about. Pretend to be inanimate object--fog, wind, leaf--write how they might feel.	Read maps; draw to scale. Show sectional (cutaway) view of the continent, Isthmus of Panama and Panama Canal, or of a volcano, or Grand Canyon. Show comparisons of altitudes, ages, etc. Make a time line showing where you fit in the history of the country studied. Use it to make comparative studies of events in different countries. Plan trips--distance and time. Compare speeds of transportation--land, water, air. Have dramatic play with money situation. Plan and play number games.	SOCIAL STUDIES

MUSIC-RHYTHMS	ARTS AND CRAFTS	
Make a study of great scientists to see if any of them were also good musicians. Do some research on the value of musical therapy. Study supersitions about music and point out their fallacies. Demonstrate the differences among the various instruments of the orchestra explaining the variations in tone. Use glass tumblers to create music. Explain. Study bell ringing and participate in a group of bell ringers. Explain to your classmates the scientific principle involved.	Analyze the rainbow and the spectrum. Show the difference between the colors in light and the colors in a paint box. Explain color-blindness and why certain colors are used for traffic signs and highway markings. Draw safety-campaign posters and pictures. Collect driftwood. Identify the kind of wood and use it in an artistic flower arrangement. Study photography. Develop and enlarge your own pictures and exhibit them. Draw the different types of clouds. Illustrate your science study, using a variety of media, i.e., pastel chalk birds, water color trees, India ink wash flowers.	SCIENCE
Extension Plan and produce a musical assembly program. Write original compositions for a simple instrument. Plan a listening program for the class, choosing music from the classics. Organize small ensembles--choral or instrumental. Attend local civic musicales, recitals, operas, ballet performances, etc. Record on a tape a musicale. Help plan and produce a dance program. Work out exercises and stretches for warming-up session in dance group.	Make rhythm instruments like gourds, tambourines, clappers, cymbals, marimbas, flutes, whistles, drums, banjo, castanets, maracas. Draw impressions of musical numbers. Illustrate scenes from great musical productions, operas, etc. Produce background music for art exhibit or tea.	MUSIC & RHYTHMS
Draw designs or pictures to musical accompaniment. Illustrate songs for cover of sheet music. Draw, paint, construct scenes for operetta. Design costumes for play or dance.	Extension Draw rainbows at top of paper. Write paragraph about each color. Cut pictures depicting feelings--happiness, fear. Study equipment, other media, techniques. Attain more skill in art know-how. Visit art museum and art department of the library, ceramic studio, etc. See films, exhibits, etc. Paint for relaxation. Make gift cards, Christmas cards, woven gifts, etc. Make puppets. Make ink blot designs. Study art and artists. Do various kinds of printing--make posters. Create designs.	ARTS & CRAFTS

SOCIAL STUDIES	SCIENCE	
Make a survey of conservation needs in the community. Follow through. Show how science has contributed to better living--home appliances, medicines, travel, recreation, communications, etc. Study the new methods of communication and how they are affecting the lives of the people of the world. Show how such things as the transistors are changing our way of life.	**Extension** Experiment--Demonstrate experiments for other classes. Make extensive use of equipment like microscopes, microscope projector, telescopes, kits on soil, weather, chemistry, machines, etc., plastic models of parts of the body. Plant seedling trees, seeds, bulbs. Make an aquarium, a terrarium, glass-side box for root study. Maintain science corner in the room or in the school hall--exhibit. Have a science fair and exhibit projects. Work on inventions. Collect rocks, leaves, nests, insects. (must identify) Care for pets and plants. Find current events--re: science. Construct tree ring time line.	SCIENCE
Listen to, play, sing music of the country studied. Read about the country's musicians and composers. Learn and teach the dances of the country. Create dances using some of the characteristic dance steps of the country. Know and tell the stories behind the folk songs, using such books for reference as Spaeth's "A History of Popular Music," etc. Write an operetta based on folklore. Know and tell the story of some of the early pipe organs, reed organs, and pianos brought around the Horn or across the plains.	Create dances based on movements of machinery. Use a drum for rhythms. Create music typifying science concepts. Create a dance about nature or some scientific phenomenon. Listen to recordings of bird calls and animal sounds. Write music using bird calls as a basis.	MUSIC & RHYTHMS
Participate in local art and crafts festival. Draw murals, pictures, slides, etc. depicting life and surroundings of the area studied. Weave, using native designs. Experiment with different media to produce unusual textures. Produce a resource kit of your area to exchange with another part of the country. Draw pictures of your community to go in an exchange scrapbook for Jr. Red Cross. (These could be photographs you took.)	Construct desert terrarium, aquarium, etc. Make weather-measuring instruments and chart daily weather report. Make a papier-mâché volcano or relief map. Draw designs using science areas for subjects such as fish, ferns, animals. Sketch from nature--still life. Make nature blueprints, sun prints. Make papier-mâché animals and figures depicting various ages of man.	ARTS & CRAFTS

LANGUAGE ARTS	ARITHMETIC	
Study lives of great scientists and report studies in written or oral form. Make graphs, charts, scrapbooks, and vocabulary lists on different fields of science studied. Conduct panel discussions, hold debates, forums, etc. Interview home-town scientists. Write for current information from large companies like DuPont, Abbott Laboratories, Dairy Council, Science Research Associates, etc. Read and report articles found in Science News Letter and other scientific magazines. List state birds and flowers. Make booklets on science principles--water cycle, clouds, growing things.	Prepare illustrations of comparisons of liquid measures, dry measures, solids, etc. Use chart of caloric values of foods, figure food needs of classmates, parents, pets, etc. Figure the densities of different kinds of woods. Learn to use a slide rule. Experiment with the diet of pet rats. Accurately measure food intake, weight. Chart growth or loss of weight. Note other changes. Keep weather chart recording daily readings of temperature, barometric pressure, precipitation, etc. Work out problems of pulleys and other simple machines.	SCIENCE
Write stories to musical accompaniment. The stories may describe the musical feeling, or the music may be used solely to set the climate. Create the musical background for a puppet play or for another type of play. Write music for operetta or to accompany verse-speaking choir. Make up a musical travelogue. Choose records for background music and sound-effects for a play. Create dance to accompany verse-speaking choir.	Construct musical instruments which require arithmetic computation such as xylophone, marimba and other percussion instruments. Make a graph or chart showing the length of vibrations for each tone. Show the extremes of high and low tones which the human ear can hear. Compare with animals such as the dog and rat. Study some graphs which have been made of the human voice and other sounds.	MUSIC & RHYTHMS
Illustrate stories, poems, songs, book covers, etc. Make bookmarks, book plates, book covers, dust covers for books, notebooks, etc. Study early books, illuminated lettering. Construct stage properties, paint scenery for a play. Design costumes for play. Make puppets to fit original story or play. Make scenery. Arrange bulletin boards. Make classbook. Use customs--cut off captions or conversation. Write own versions. Write directions of an art lesson for another class.	Construct charts, graphs, tables, games, flash cards, and other graphic pictures for rapid learning of number facts. Make an abacus. Make a decorative chart to record class data such as class officers, books read, batting averages, etc. PORTLAND PLAN FOR MORE CAPABLE LEARNER	ARTS & CRAFTS

LIST OF M.C.L. MATERIALS

(Materials available from the Curriculum Department on a limited basis)

Arithmetic **Copies Available**

1. Arithmetic Surprises -------------------- Teacher's copy only
   order no. In-S-C-En-29
2. Math Enrichment for Grade 5 ------------- Student copies available
   order no. In5-S-C-En-45
3. Math Enrichment for Grade 5 ------------- Teacher's Edition
   order no. In5-T-C-En-45a

Miscellaneous

1. Treasure Hunting in the Encyclopedia ----- Extra copies available
   order no. In-T-C-En-03
2. Pupil Interest Survey ------------------- Extra copies available
   order no. In-S-C-En-40

Science

1. Insect Outline -------------------------- Extra copies available
   for teachers--
   order no. In-S-C-En-20
2. Birds ----------------------------------- Extra copies available
   for teachers--
   order no. In-S-C-En-24
3. Snakes and Reptiles --------------------- Extra copies available
   for teachers--
   order no. In-S-C-En-15

Fresno City Unified School District

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Name ______________________________ Arithmetic

Date ______________________________

ARITHMETIC SURPRISES

1. Choose any number; for example, 375.---------- 375
2. Write the next four larger numbers ----------- 376
   377
   378
   + 379
3. Add 1885
4. Divide by 5 ---------------------------- 5)1885
5. Subtract 2

What did you discover?

Now try some of your own.

- -

1. Take any 4-place number, such as 4,321 ------ 4321
2. Write the first figure on the left ---------- 4
3. Write the first 2 figures ------------------ 43
4. Write the first 3 figures ------------------ 432
5. Add these ---------------------------------- 479
6. Multiply by 9 ------------------------------ x 9
7. Add the sum of the figures of 4,321 4311
   4 + 3 + 2 + 1 = 10 ------------------------- 10

What do you discover?

Now try some of your own.

MR:ea
5/25/61
In-S-C-En-29

Fresno City Unified School District

Language
Grade 5

BIOGRAPHIES

Directions: Start a folder of biographies of great Americans. Use the encyclopedia or books from your library. Write each biography in four parts:

I. Early childhood (Home - school)

II. As a young adult

III. What he did for a living

IV. Why this person is remembered

V. Illustrate it
(picture cut from magazines or drawn by you)

MR/PS:sam
In-S-C-En-33

Fresno City Unified School District

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INSECT OUTLINE

Name ______________________ Date ______________

Complete the following outline.

Title - Name of Insect

I. Phyla
   A. Arthropoda

II. Class
   A. Insecta ("in sections")

III. Order
   A. (Find the order of your insect. Using the outline below, find that order and copy it on your paper.)

IV. Type of development
   A. (The order of your insect should tell you what development your insect goes through if you do not already know.)
   (Find the type of development outlined below and copy this outline on your paper.)

V. What it eats
   A.
   B.
   etc.

VI. What good it does
   A.
   B.
   etc.

VII. What harm it does
   A.
   B.
   etc.

VIII. How it protects itself
   A.
   B.
   etc.

IX. Other interesting facts
   A.
   B.
   etc.

MR:ea
5/22/61
In-S-C-En-20

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BIRDS

Guide Questions

Name ______________________________ Date ______________

1. Name or names of bird
2. To what family it belongs
3. Size of bird
4. Description of male
5. Description of female
6. Description of nest
7. Description of eggs
8. Where it lives
9. When it migrates
10. What it eats
11. Enemies
12. How it protects itself from its enemies
13. How it helps or troubles Man
14. Other interesting facts

Accompany each report with a picture or drawing of the bird.

Draw pictures of the different types of bird beaks.

Tell what kind of food is eaten by each type of beak, or what this type of beak is used for.

BIRDS

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MR:ea
5/24/61
In-S-C-En-24

Fresno City Unified School District

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SNAKES AND REPTILES

Guide Questions

Name ______________________________ Date ______________________

1. Give the definition of a reptile.

2. a. Name of snake or reptile:

   b. Type (poisonous or non-poisonous):

   c. Where it is found (place and type of area - desert, wooded area, etc.):

   d. Description (color, pattern, shape, unusual features):

   e. Size (length, weight, diameter):

   f. How and where its young are born:

   g. What it eats:

   h. How it catches its food:

   i. Enemies:

   j. How it protects itself:

   k. What good it does:

   l. What harm it does:

   m. Other unusual features:

   Tell about hibernation.

   If poisonous, tell how it injects the poison into the body of a human and how it affects the man.

SNAKES AND REPTILES

Bibliography

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2. Cochran, Doris: Our Snake Friends and Foes, *National Geographic*.
3. Cruickshank, Helen G.: *Wonders of the Reptile World*, 1959.
4. Hecht, Bessie M.: *All About Snakes*, 1956.
5. Sherman, Jane: *The Real Book about Snakes*, 1955.
6. Zim, Herbert S.: *Alligators and Crocodiles*, 1952.
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MR:ea
5/22/61
In-S-C-En-15

Fresno City Unified School District

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Scientific Method

GENERAL SCIENCE

(Experiment)

Subject: ______________________ Name: ______________________________

Activity — Experiment: (To Show) ______________________________________

Problem to be solved: ____

Materials: (needed for experiment) ___________________________________

Data (info) Hypothesis: ____

____

Testing Hypothesis

Results: (Things learned) *What *When *Where *How *Why *

Conclusions

1. ____
2. ____
3. ____
4. ____
5. ____

Practical Application: (Uses or where seen)

Applications

1. ____
2. ____

Research Projects: (Follow-up report may be written on reverse side)

1. ____
2. ____

SPECIAL NOTE TO STUDENT: DO NOT DO EXPERIMENT USING FIRE, CHEMICALS OR ELECTRICITY WITHOUT ADULT SUPERVISION.

In-T-C-En-06

Fresno City Unified School District

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Social Studies
Student Lesson Sheet

Name________________________________

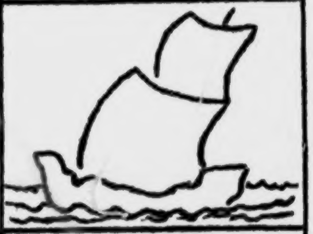
Date________________________________

A GREAT IDEA !

Make a chart on "Great Ideas." List them in chronological order. Include paragraphs on how each "Great Idea" has helped. Illustrate with drawings or cut-outs for each. See pages 26, 76, 88, 102, 116, 133 in the state text Exploring Our Country. Now hunt for the rest by yourself.

Use a very large sheet of art paper. Make five (5) columns with these headings:

Example:

Who	Date	Idea	How it helped	Picture
Columbus	1492	By sailing west the east could be reached	The "New-World" was discovered	

ml
6-16-61
In-S-C-En-43

Fresno City Unified School District

NEWS REPORTING

____
Name of reporter

Where I found my information: ______________________________
Name of media - magazine, film-strip, etc.

Title of articles: ______________________________

Interesting Things I Have Learned From This Article:

1. ______________________________
____
2. ______________________________
____
3. ______________________________
____

Something Special I Would Like To Tell About This Article:

____

____

____

____

____

____

____

ILLUSTRATION(S):

◇ √here I have written additional information on the reverse side!!!!

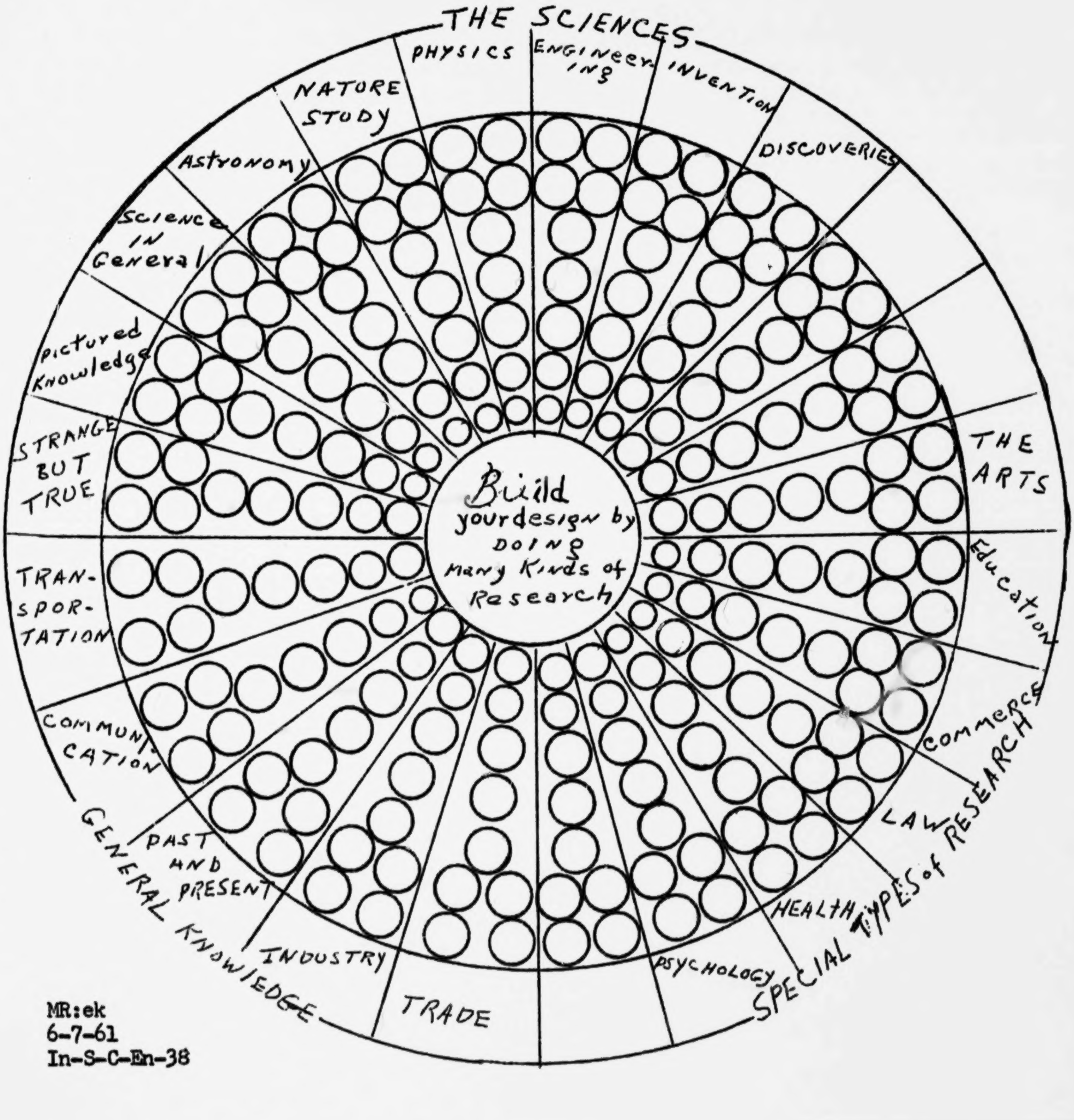
Is this report complete? ☐ yes ☐ no √one

MR:ek
6-6-61
In-S-C-En-37

Fresno City Unified School District

MY RESEARCH DESIGN

To the researcher: -Here is an unfinished design. You may make it yours if you complete it as you do your research. You may wish to build YOUR DESIGN in this way. (1) Get the question you are going to answer. (2) Read it and write the question on the next page. (3) Write your research report. (4) Put the number of the question in as many of the small circles as it belongs. (5) Then shade in the circle with a color. Very few questions belong in more than three parts. If you answer many questions and record each one as you answer it, it will be fun to watch your pattern grow.


THE SCIENCES
PHYSICS
ENGINEERING
INVENTION
DISCOVERIES
NATURE STUDY
Astronomy
Science IN General
Pictured Knowledge
STRANGE BUT TRUE
TRAN-SPOR-TATION
COMMUNI-CATION
PAST AND PRESENT
INDUSTRY
TRADE
PSYCHOLOGY
HEALTH
LAW
COMMERCE
Education
THE ARTS
GENERAL KNOWLEDGE
SPECIAL TYPES of RESEARCH
Build your design by DOING Many Kinds of Research

MR:ek
6-7-61
In-S-C-En-38

Name________________________________

RESEARCH PROJECT

(To the teacher: Pictures of various animals, insects, or birds taken from magazines should accompany this project.)

The Wonders of Life on Our Earth

A. Questions to guide your research:

1. Can you find the name of your animal, insect, or bird?
2. Where does it live?
3. What does it eat?
4. What are its habits?
5. What is an interesting fact concerning it?
6. Can you find its scientific name?
7. Make your animal, insect, or bird the central character of a story which you will write.

   Use facts concerning your animal, etc. which you have discovered in your research in writing your story.

B. How to write up your report

1. State your source of information:
   - a. Kind of reference book, such as, encyclopedia, dictionary, textbook, library book, etc.
   - b. Title of source
   - c. Volume number
   - d. Page number
2. Use dictionaries to look up all words you do not completely understand.
3. Make a list of these words together with their definitions.
4. Use paragraph form in putting together your information.
5. Use dictionaries to find correct spelling.
6. Check for complete sentences:
   - a. Begin all sentences with a capital letter.
   - b. End sentences with punctuation: period (.), question mark (?), or exclamation mark (!).
7. Let someone else read your work.
8. Check constantly with this guide sheet to make sure that you are following directions.

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RESEARCH REPORT --- WHAT - WHERE - WHEN - HOW - WHY - THINK

Researcher's Name: ______________________________ Date: ____________________

Card	Research Category:	Encyclopedia:	Vol.#	Page
	Question:			

Information (Answer to question) **through research:**

____

____

Additional information I found on this subject:

____

____

____

____

____

____

____

____

Related Subjects:

____

____

ILLUSTRATION:

NOTE: Use other side if needed - or additional paper.
Is this report complete???

MR/PS:ek
In-S-C-En-14

Fresno City Unified School District

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Name______________________________

Date______________________________

School________________Grade______

Teacher___________________________

PUPIL INTEREST SURVEY

1. What are your favorite subjects in school? Number these subjects 1, 2, 3, etc. to show the order in which you would choose them.

______Reading	______Handwriting	______Language
______Music	______Arithmetic	______Spelling
______Art	______Science	______Spanish
______Games	______Social Studies	______Other special subjects

2. Do you have your own library card?________How often do you use the public library? Circle the answer:

Never Once-in-a-while Every two weeks Every week

What is the best book you have ever read?______________________________

____

3. Circle the parts of the paper that you like to read:

News
Weather
Editorials

Sports
Tides
Social

Comics
Ads
Special features

Theater, Radio and Television

4. What magazines do you like to read?______________________________

____

5. What comic books do you enjoy?______________________________

____

6. What kind of radio programs do you like best?______________________________

____

7. What type of television programs or movies do you prefer?______________________________

____

8. Circle any places you would like to visit.

Ferry
Airport
Beach
Ball game
Fish cannery
A circus
Art gallery
Planetarium
Star of India
Old Spanish Lighthouse
Serra Museum
Tijuana
One of the dams
A broadcasting station (radio or T.V.)
Starlight Opera
Disneyland
Natural History Museum
Museum of Man
Scripps Institute
Palomar
Zoo
Symphony concert
A national park
Knott's Berry Farm

9. List any foreign countries you have visited (which you can remember).

____

____

10. Circle any organizations to which you belong. Check any to which you would like to belong:

Boy or Girl Scouts
Cub Scouts
Brownies
Campfire Girls
Blue Birds
Gray Y
Class officer
Safeties
Host and Hostess
Junior Traffic Patrol
Student Council
Games Teacher
Office monitors
Sunday School
Church choir
School orchestra
School Glee Club
Nurse's helper
Y.M.C.A. or Y.W.C.A.
Private club

11. List any lessons you take in addition to your regular school work:

____

____

12. What do you usually do after school?______________________________

____

13. What things do you do with your family on Saturdays and Sundays?____________

____

14. What chores do you do regularly at home?____________________

____

15. Do you have an allowance?______What do you buy with your money?____________

____

16. Do you ever earn money?________How?____________________

____

17. Do you have any pets?________What kind?____________________

18. Do you have a hobby?________What is it?____________________

19. What would you like to do when you are grown?____________________

____

20. In each line below you have three choices. Circle the one activity you would prefer doing:

a.	Plant a garden	make up a song	listen to radio music
b.	Play checkers	play an instrument	read about scientists
c.	Sing in a chorus	copy a poem	write to a child in another country
d.	Paint a picture	visit an art gallery	go to a pet show
e.	Play with a few friends in the yard	make a puppet	play a team game after school
f.	Visit a museum	go to the zoo	collect something
g.	Go to church	read Bible stories	give or make something for the Junior Red Cross
h.	Act in a play	watch a play	write a play
i.	Design stage scenery	invent something	do a jigsaw puzzle
j.	Write a story	go to the County Fair	read a good book
k.	Go camping or horseback riding	go to a ball game	watch television
l.	Make any scientific model	go fishing	go to the library

m.	Do square dancing	go swimming	watch a ball game
n.	Make up a poem	do craft work	go to a concert or movie
o.	Do carpentry	make a dress	do cooking
p.	Be president of your class	win a race	have a poem published
q.	Take a ride in the family car	clean or beautify the house	take care of your pet
r.	Read stories to little children	have a friend over to play	listen to older people talking
s.	Give a party	play checkers, dominoes, or cards	go for a walk alone or with your dog

* If you were given three wishes only, what would you wish for yourself, your family, the community, or the world?

CHOOSE WISELY!

a.

b.

c.

ml
6-13-61
In-S-C-En-40

S5 - A - 1

Fresno City Unified School District

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Name______________________________ Arithmetic

Date______________________________ Student Lesson Sheet

MEASURES

(Look them up)

Write your answers on another piece of paper.

1. Abraham Lincoln said, "Fourscore and seven years ago . . ."
   How long is fourscore and seven years?

2. The giant had seven league boots.
   How far is seven leagues?

3. "I will return in a fortnight."
   How long is a fortnight?

4. The shipwreck lay in 15 fathoms of water.
   How deep is 15 fathoms?

5. Noah's Ark measured 300 cubits in length, 50 cubits in width, and 30 cubits in height.
   How long is a cubit?

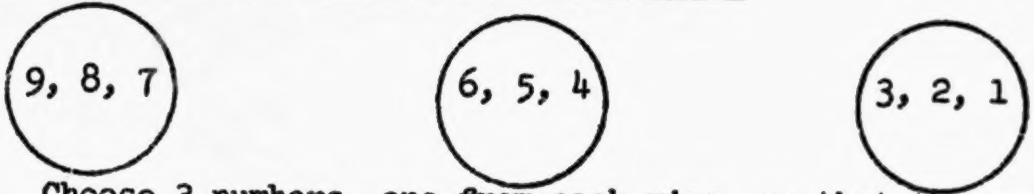
6. At the Kentucky Derby, horses are raced on a track 10 furlongs in length.
   How long is a furlong?

MR/ml
6-14-63
In5-S-C-En-53

S5 - A - 2

FINDING ADDENDS FOR A GIVEN SUM

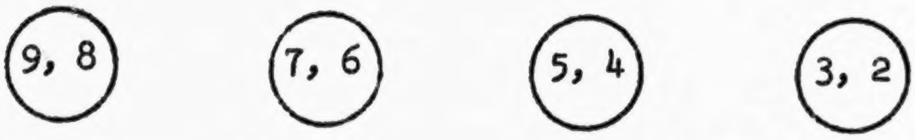
Write your answer on another piece of paper



1. Choose 3 numbers, one from each ring, so that the sum is 18.

2. Follow the instructions in No. 1 to make three sums of 17.

3. Follow the instructions in No. 1 to make six sums of 16.



4. Choose 4 numbers, one from each ring, so that the sum is 24.

5. Follow the instructions in No. 4 to make six sums of 22.

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6-14-63

ARITHMETIC QUICKIES

Write your answers on another piece of paper.

1. If eggs are 26¢ a dozen, how many can you buy for a cent and a quarter?

2. If it takes 3 minutes to boil an egg, how many minutes will it take to boil 3 eggs?

3. A bottle and a cork cost $1.10. The bottle cost $1.00 more than the cork. What did each cost?

4. How many telephone poles are necessary to reach the moon?

5. An empty barrel weighs 10 pounds. What can you put in the barrel to make it weigh 9 pounds?

6. A man wants to build a fence along one side of his yard. The distance is 60 feet. How many posts will it take if he places them 10 feet apart?

7. Write twelve thousand twelve hundred twelve.

8. I have two current United States coins. Together they total 55¢. One is not a nickel. What are the coins?

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S5 - A - 4

SPACE-AGE ARITHMETIC

Write your answers on another piece of paper.

1. On the moon, objects weigh about one-sixth of what they do on earth. If your brother weighs 108 pounds, on the moon he would weigh: (a) 18 pounds; (b) 108 pounds; (c) 648 pounds.

2. The farthest the moon gets from the earth is 252,710 miles. The nearest it comes is 221,463 miles. How much shorter is the trip if you wait until the moon is at its nearest point? (a) 3,247 miles; (b) 347 miles; (c) 31,247 miles

3. Your rocket vehicle is traveling at 160 miles a minute. The pilot sees an object straight ahead. It takes him 3 seconds to see, decide and start acting. How far have you traveled in those 3 seconds? (a) 8 miles; (b) 53 1/3 miles; (c) 3 miles

4. When the Atlas rocket went into orbit, it was circling the earth once every hundred minutes. Traveling at that rate, how many times would you go around the world in 80 days? (There are 115,200 minutes in 80 days.) (a) 115; (b) 1,152 (c) 117

5. The pull of gravity on the moon is one-sixth of what it is on earth. If you can jump 6 feet on earth, on the moon you could jump: (a) only 1 foot; (b) 6 yards; (c) 36 feet.

6. Traveling at about 18,000 miles an hour, it took Russia's Sputnik I about 1 3/5 hours to circle the earth. How many miles was the satellite traveling in one trip around the earth? (a) about 12,000 miles; (b) about 29,000 miles; (c) about 18,000 miles

7. Radio waves, like light waves, travel at 186,000 miles a second. If you got to the moon and wanted to send a message back to your family, how long would it take your radio message to reach the earth, a quarter of a million miles away? (a) less than a half a second; (b) about 1 hour, 15 minutes; (c) between 1 and 2 seconds

8. The moon weighs about 81 quintillion tons. This number is written: (a) 81,000,000; (b) 81,000,000,000; (c) 81,000,000,000,000,000,000.

9. The moon always keeps the same side turned toward the earth. Because of slight rocking, 59 per cent of its surface has been seen from the earth. What per cent of the moon's surface has never been seen from the earth? (a) 50 per cent; (b) 41 per cent; (c) 61 per cent

10. The pull of gravity on the planet Jupiter is almost 2 2/3 times what it is on earth. If your brother, weighing 108 pounds, now decides to go to Jupiter, about how much would he weigh there? (a) almost 36 pounds; (b) about 110 2/3 pounds; (c) almost 288 pounds

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6-14-63

S5 - A - 5

CAN YOU ADD?

Write your answers on another piece of paper.

1. You go to the corner grocery store with eight deposit bottles valued at 37¢ and buy groceries priced at $2.68. How much change do you get from a $5 bill?

2. Let's suppose the clerk at your neighborhood delicatessen specializes in illegible bills, and has just scrawled the amounts below on a paper bag. What do they total?

   1.26
   48
   61
   25
   175
   27
   100

3. Here is a chance to test your mental arithmetic. How much is 27 plus 76?

4. You receive an orange and black turtleneck sweater for your birthday and decide to exchange it. At the store, you're handed a merchandise credit slip for $11. You select a sweater for $8.95 and also buy a shirt for $4.98. How much cash do you actually pay out?

5. A man bought groceries that cost $2.49. He gave the clerk a $10 bill. How many of each of these currency items would be returned to the man as change?

   $5( ) $1( ) 50¢( ) 25¢( ) 10¢( ) 5¢( ) 1¢( )

6. At the supermarket you get one blue stamp valued at a tenth of a cent for each 10¢ purchase. How many groceries must you buy to get an electric toaster priced in the catalog at $17.50?

7. Cab fare from the station is 50¢ and you decide to tip the driver 15¢. Because you have only 20¢ in nickels, you give him a dollar bill and ask for change. But the driver has only a half dollar in change. How do you solve this predicament?

8. To call your grandmother across the continent, you need 55¢ for the first three minutes and 15¢ for each additional three minutes. You have never completed this call in less than 17 minutes. What is the minimum number of coins you'll need?

9. Because you favor "small, uneconomical" purchases, you decide to pay a penny extra and buy only one of each of these items at a supermarket sale:

asparagus	2 cans for 23¢
soup	4 cans for 47¢
soda	3 bottles for 29¢
coffee	2 cans for $1.99

   What does your bill total?

10. Arthur's wife Miriam collects traffic tickets the way some people collect stamps. Her latest acquisitions include: two speeding tickets ($10 each), one ticket for passing a red light ($5) and four tickets for parking ($3 each). Arthur agrees to pay for all the tickets but tells Miriam he's going to deduct $2.50 from her $45 weekly household allowance until the tickets are paid for. How many weeks must Miriam tighten her belt?

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6-14-63

S5 - A - 6

USING NEW SYMBOLS

In examples 1-26, write T for each statement that is correct, and F for each statement that is not correct. Write your answers on another piece of paper.

____ 1. 6 + 8 = 14

____ 2. 12 - 4 = 8

____ 3. 8 + 4 = 9 + 3

____ 4. 11 - 3 = 9 - 2

____ 5. 9 + 8 - 7 = 1 + 4 + 5 + 1

____ 6. 2 + 3 + 4 = 10 - 1

____ 7. 5 + 11 = 15

____ 8. 16 - 9 = 7

____ 9. 9 + 8 = 11 + 6

____ 10. 15 - 6 = 12 - 3

____ 11. 12 - 8 = 3 + 1

____ 12. 6 + 7 = 15 - 2

____ 13. 9 + 12 = 21

____ 14. 21 - 13 = 7

____ 15. 10 + 4 = 7 + 6

____ 16. 19 - 4 = 15 - 0

____ 17. 21 + 2 = 16 + 6

____ 18. 15 - 3 = 6 + 6

Remember there is often a number name, such as 6, that is easier to use than a number name in parentheses as (2 + 4).

____ 19. (2 + 4) + (8 + 2) = 16

____ 20. 8 + (7 - 2) = (8 + 7) - 2

____ 21. 6 + n = 15 if n = 9

____ 22. 11 + n = 14, if n = 2

____ 23. n + n = 16, if n = 8

____ 24. n - 4 = 11, if n = 15

____ 25. 15 - n = 9, if n = 7

____ 26. 17 - n = 8, if n = 7

There is a symbol to show that numbers are not equal. It is ≠. We write 8 ≠ 6. We read this as 8 is not equal to 6.

In exercises 27-38, write = or ≠ on each blank.

27. 9 + 3 ___ 12

28. 15 + 2 ___ 19 - 2

29. 25 - 4 ___ 20

30. 17 - 0 ___ 2 + 3 + 4

31. 16 + 9 ___ 26 + 0

33. (4 + 5)-7 ____ 2 + (5 - 5)

34. 18 - n ____ 7 + 2, if n = 9

35. 25 + n ____ (16 + 16) + 1, if n = 7

36. 18 -(7 + 1) ____ 5 + (3 + 1)

37. 16 + n ____ 26 - n, if n = 5

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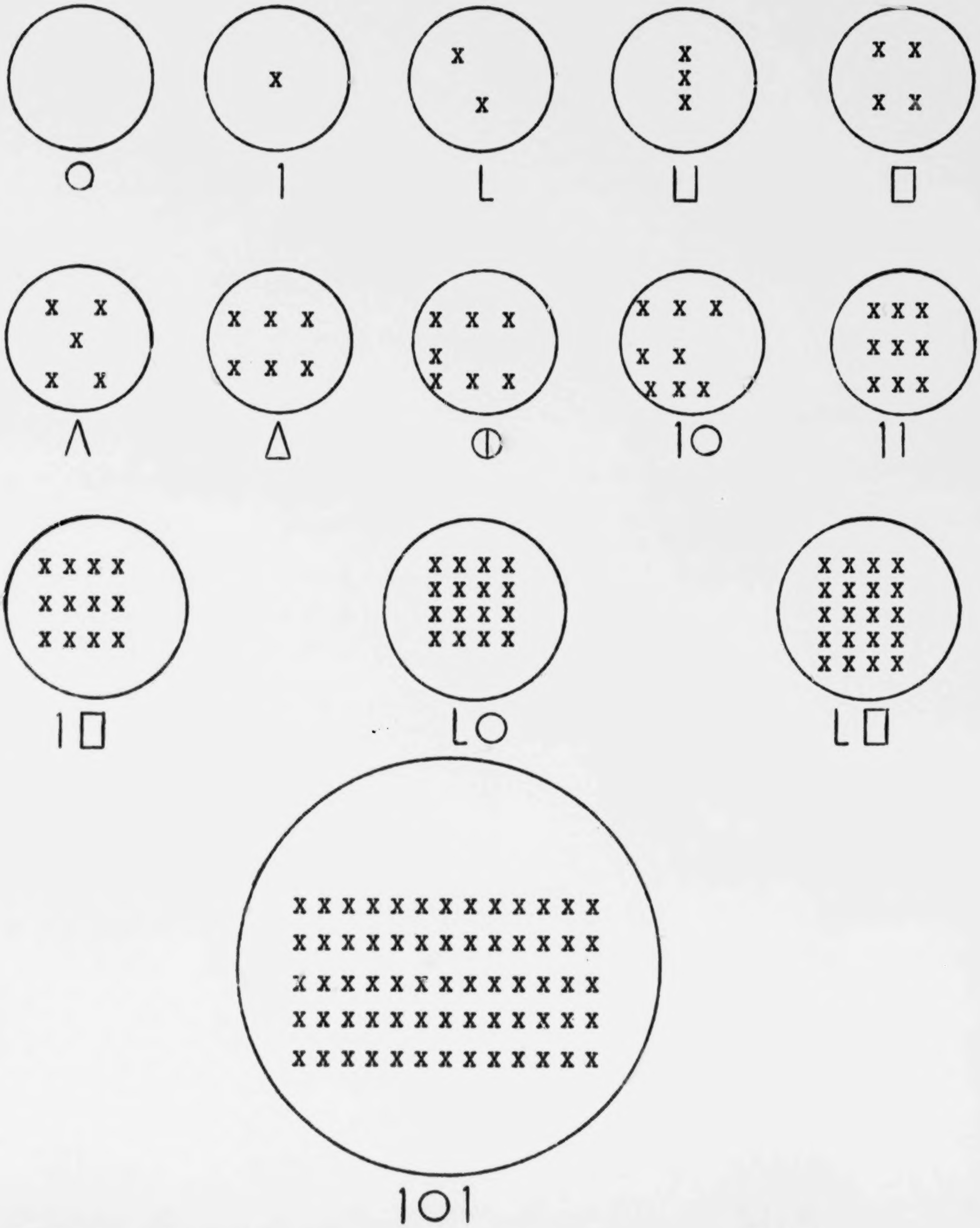
6-17-63

S5 - A - 7

SYMBOLS FOR NUMBERS


○
1
L
⊔
□
Λ
Δ
⦶
10
11
1□
L○
L□
101

S5 - A - 7a

Use SYMBOLS FOR NUMBERS to work examples below. Write your answers on another piece of paper.

ADD:

1. ▯ + ⌊ =
2. ▯ + ▯ =
3. △ + ○ =
4. ⦶ + ⊔ =
5. △ + ⊔ =
6. △ + ○ =
7. |○ + |○ =
8. △ + △ =
9. ⌊ + ⦶ =

SUBTRACT:

1. △ − ⌊ =
2. |⌊ − ⊔ =
3. |▯ − △ =
4. |○ − ▯ =
5. || − ⊔ =
6. |▯ − ∧ =
7. △ − ○ =
8. ⌊○ − |○ =
9. ⌊▯ − △ =

MULTIPLY:

1. △ x ∧ =
2. ⌊ x ⊔ =
3. ⊔ x ▯ =
4. ▯ x ∧ =
5. | x | =
6. ⌊ x |○ =
7. ○ x ▯ =
8. ∧ x ▯ =
9. |○ x ⌊ =

DIVIDE:

1. △ ÷ ⊔ =
2. |▯ ÷ ▯ =
3. ⌊▯ ÷ ∧ =
4. | ÷ | =
5. |▯ ÷ ⊔ =
6. |▯ ÷ ▯ =
7. ○ ÷ ▯ =
8. ⌊▯ ÷ ▯ =
9. ⊔○ ÷ ⌊ =

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6-18-63

S5 - A - 8

ARITHMETIC

Copy the numerals 1-15 on your paper. Next to each, write the correct words or numerals to complete this chart.

	Numbers Operated On	Result	Operation Used	Mathematical Sentence
1.	12, 9	3	Subtraction	12 - 9 = 3
2.	18, 9	9		
3.	6, 3	9		6 + 3 = 9
4.	5, 8			5 x 8 = 40
5.	18, 3			18 ÷ 3 = 6
6.	6, m	13	Addition	
7.	p, 7	6	Subtraction	
8.	3, 7, 4		Addition	
9.	14, t	8	Subtraction	
10.	12,	5	Subtraction	
11.	15, 9	6		
12.	3, 14	17	Addition	
13.	12, 4		Division	
14.	5, 3		Multiplication	
15.	6, 2		Subtraction	

Copy each mathematical sentence below. Fill in the correct answer, "less than," "more than," or "equals."

1. (8 + 4) _____ 11
2. (1 + 3) _____ 9 + 1
3. (2 x 3) _____ 3 x 3
4. 2 + 7 _____ 11 - 2
5. (2 + 3)+4 _____ 1 + (5 + 3)
6. (3 x 4) _____ (2 x 5)

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6-18-63

S5 - A - 9

ARITHMETIC

Which of the following statements are true and which are false? Write your answers on another piece of paper.

___ 1. $3 \times 5 > 16$

___ 2. $3 \times 5 \neq 16$

___ 3. $1 + 1 > 1 \times 1$

___ 4. $6^3 > 5^3$

___ 5. $8^2 \neq 2^6$

___ 6. $173 + 379 < 11 \cdot 52$

___ 7. $10^5 > 10{,}000$

___ 8. $2^5 = 32$

___ 9. $12^2 \neq 144$

___ 10. $2^{10} = 4^5$

___ 11. $3 \times 5 < 16$

___ 12. $3 \times 5 = 16$

___ 13. $18 \cdot 2 = 6^2$

___ 14. $2^{10} > 10^3$

___ 15. $3^2 < 2^3$

___ 16. $8 < (173-97) \times 0$

___ 17. $4^3 < 3^4$

___ 18. $11^2 = 121$

___ 19. $12 \times 13 < 13^2$

___ 20. $173 \cdot 174 > 173^2$

Example:

When a number is to be multiplied by itself several times we abbreviate as shown by these examples:

$2 \times 2 \times 2 = 2^3 = 8$, 2 to the third power

$4 \times 4 \times 4 = 4^3 = 64$, 4 to the third power

$5 \times 5 = 5^2 = 25$,

$10 \times 10 = 10^2 = 100$,

$10 \times 10 \times 10 \times 10 = 10^4 = 10{,}000$, etc.

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6-18-63

S5 - A - 10

ARITHMETIC

Which of the following statements are true and which are false? Write your answers on another piece of paper.

____ 1. $3 \times 5 > 16$

____ 2. $4 \times 5 < 16$

____ 3. $3 \times 5 \neq 16$

____ 4. $3 \times 5 = 15$

____ 5. $1 + 1 > 1 \times 1$

____ 6. $18 \cdot 2 = 6 \times 6$

____ 7. $6 \times 5 > 5 \times 8$

____ 8. $2 \times 9 > 7 \times 4$

____ 9. $9 + 7 \neq 10 + 3$

Copy each mathematical sentence below. Fill in the "less than,""greater than," or "equals," sign in order to make a true statement.

1. (3×9) ____ (6×8)
2. $(12 + 50)$ ____ 59
3. $(20 + 15)$ ____ $(10 + 25)$
4. $(8 + 3 + 2)$ ____ $(7 + 5 + 2)$
5. $(24 - 2)$ ____ (3×7)
6. $(18 - 6)$ ____ $(9 + 3)$
7. $(5 + 8 - 3)$ ____ $(14 - 7 + 5)$
8. (6×9) ____ (9×6)

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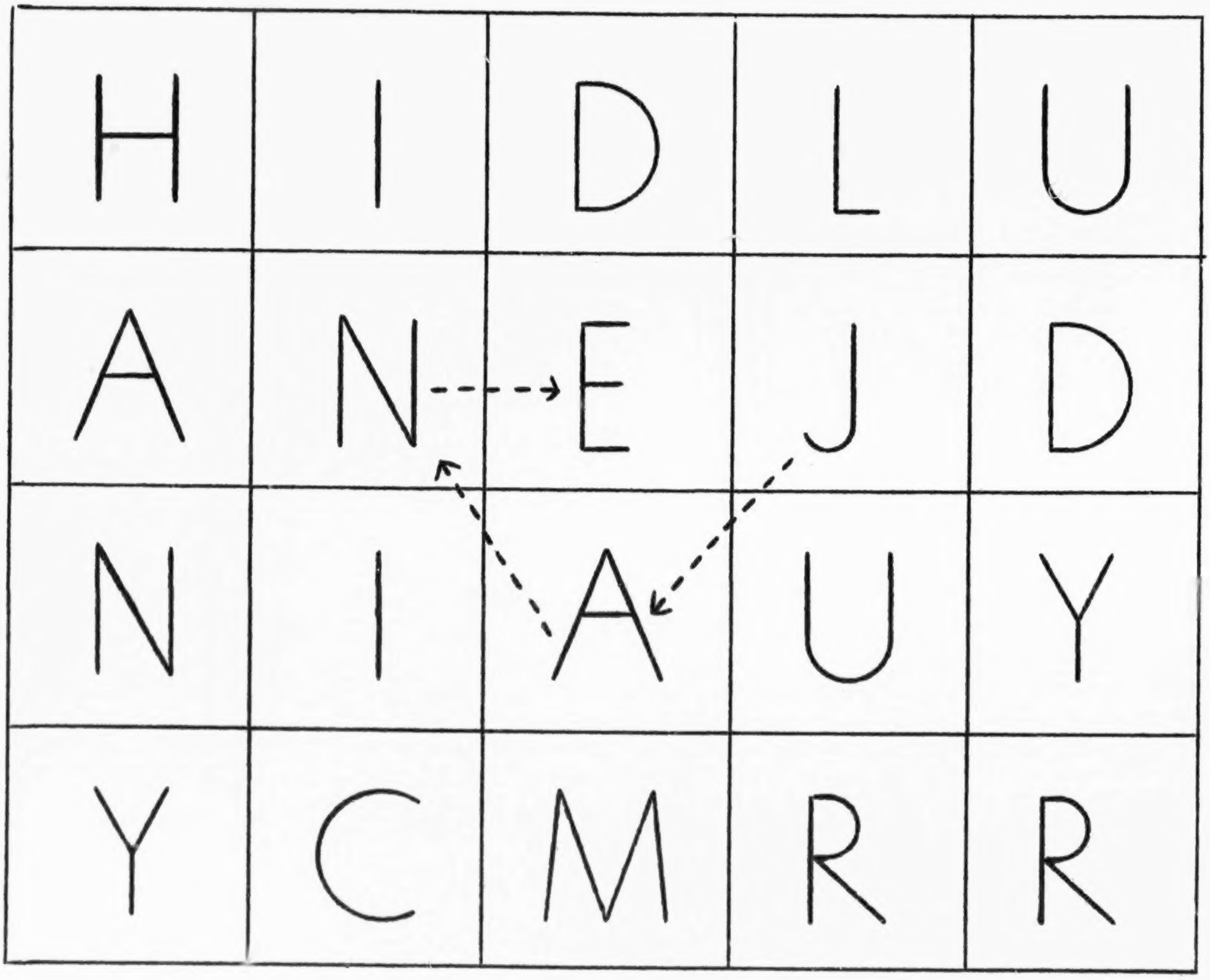
S5 - L - 1

JANE'S PATCHWORK QUILT

Write your answers on another piece of paper.



H	I	D	L	U
A	N	E	J	D
N	I	A	U	Y
Y	C	M	R	R

When Jane sewed this patchwork quilt, she cleverly worked into it her own name and the names of all her girl friends. The dotted line shows how to spell J A N E by going from letter to adjoining letter. See if you can spell ten other girl's names in the same manner. You can spell up, down, sideways or diagonally.

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S5 - L - 2

ASK MR. WEBSTER

Read the sentences below, noting especially the underlined word.

What do you think the underlined word means? Write your answer.

Look up the underlined word in the dictionary and check its definition against your answer. SURPRISED???

Write your answers on another piece of paper.

1. John said he heard a ladybird singing in the tree. Shall we believe John?
2. "You're a regular dolt," said Mrs. Brown to her husband. Was she complimenting him?
3. If a lambkin is a little lamb, is a bumpkin a little bump?
4. Which would you ride--a centipede or a velocipede?
5. What is your sobriquet?
6. If you had a pillion, what would you do with it?
7. Do plant bulbs stay dormant during the winter?
8. With what would you like to regale yourself?
9. Do you help your mother with the cuisine?
10. If you were in a dilemma would someone have to unlock a door to get you out?
11. Would you like having a quadruped for a pet?
12. Do you always deport yourself as you should?
13. Could you buy dodo eggs at the grocery store?
14. Is it good manners to masticate at the table?
15. If you had a pet pig, would you feed him pigment?

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S5 - L - 3

HUMPTY DUMPTY

Fun with Words

The space between the letters is to be filled with letters that will make words. Write your answers on another piece of paper.

1. b __________ d
o __________ e
m __________ b
b __________ m
e __________ o
d __________ b

2. s __________ l
p __________ l
e __________ e
l __________ p
l __________ s

3. p __________ s
r __________ m
o __________ e
b __________ l
l __________ b
e __________ o
m __________ r
s __________ p

4. m __________ r
a __________ e
s __________ t
t __________ s
e __________ a
r __________ m

5. w __________ d
o __________ l
r __________ r
l __________ o
d __________ w

6. t __________ m
h __________ e
e __________ h
m __________ t

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S5 - L - 4

ANTONYMS

Write your answers on another piece of paper.

accept	1.	Jack could not ________________ the offer.
work	2.	We have a new game to ____________________.
mountain	3.	The river flowed through the ____________.
sorrow	4.	There was a great deal of _______________.
question	5.	Do you know the ________________________?
depart	6.	When will the next train ________________?
evening	7.	We brushed our teeth this _______________.
friend	8.	The _____________ camp was across the river.
east	9.	The sun sets in the _____________________.
shut	10.	Did you ________________________ the window?
false	11.	Is that a ___________________________ story?
daylight	12.	Bring a flashlight for the ________________.
raise	13.	When did they ____________________ the flag?
scatter	14.	Will they _______________________ the grain?
south	15.	The needle points toward the ______________.
none	16.	Tom has _____________________ new pictures.
safe	17.	That is a _________________________ corner.
old	18.	Nick is too _______________________ to vote.
dry	19.	The grass is still _______________________.
alike	20.	Those saddles are _________________________.

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S5 - L - 5

How good are you at reading poetry?

Try this one. Write the poem substituting the correct words for the letters and numbers. Do not write on this copy.

You have to have a good ear for this one!

ESSAY TO MISS CATHARINE JAY

An S A now I mean 2 write
2 U sweet K T J,
The girl without a ||,
The belle of U T K.

I 1 der if U got that 1
I wrote 2 U B 4
I sailed in the R K D A,
And sent by L N Moore.

My M T head will scarce contain
A calm I D A bright
But A T miles from U I must
M——this chance 2 write.

And 1st, should N E N V U,
B E Z, mind it not,
Should N E friendship show, B true;
They should not B forgot.

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S5 - L - 6

Have you tried reading any foreign languages lately?

This looks rather difficult at first; but if you study it rather carefully, you will find that it is easy to read this language!

Write the poems correctly on another piece of paper.

CHINESE TEA SONG

Ohc ometo th ete asho pwit hme,
Andb uya po undo f thebe st,
'Twillpr oveam ostex cellentt ea,
Itsq ua lit yal lwi lla tte st.

'Tiso nlyf oursh illi ngs apo und,
Soc omet othet eama rtan dtry,
Nob etterc anel sewh erebefou nd,
Ort hata nyoth er needb uy.

* * * * *

Wasn't that easy?

Here's another!

DEATH AND LIFE

	cur	f	w	d	dis	and p
A	sed	iend	rought	eath	ease	ain.
	bles	fr	b	br	and	ag

(What are the two sentences?)

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S5 - L - 7

PUNCTUATION AND ABBREVIATIONS

Do you know the punctuation and abbreviation for the following?

Write your answers on another piece of paper.

1. that is
2. for example
3. which see
4. before noon
5. after noon
6. Mister
7. Mistress
8. doctor
9. in the year of our Lord
10. before Christ
11. sirs (plural of Mr.)
12. namely
13. mathematics
14. singular
15. pages
16. island
17. cash on delivery
18. boulevard
19. territory
20. plural

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S5 - L - 8

MAKE A WORD

Finish each group of sentences with words made from the three syllables at the left. Write your answers on another piece of paper.

fume pep per	We smell the__________. He spilled the__________.	whis son per	We heard her__________. She is the right__________.
gry dred hun	We counted one__________. The boys are__________.	an swer gry	Do you know the__________? Is Tom very__________?
an wom chor	He lifted the big__________. Did he see the__________?	bas tle ket	Put the boxes in the__________. What did she pour into the __________?
pa rade per	Write it on that__________. I want to see the__________.	hor dle rid	Did you guess the__________? That one looks__________.
cor din ner	Tom walked to the__________. He is ready for__________.	can dle han	Did she light the__________? Nell turned the__________.
for est get	We saw deer in the__________. What did Tom__________?	cil o pen	You left the door__________. She dropped a__________.
bit rab ter	Did Jim catch the__________? That tea is__________.	set lit tle	That bench is too__________. Where did the pioneers__________?
puz muz zle	We finished the__________. The dog wore a__________.	REREAD YOUR SENTENCES. HAVE YOU USED THE RULES FOR OPEN AND CLOSED SYLLABLES	

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S5 - L - 9

AN EXERCISE FOR USING HOMONYMS

In your dictionary find the homonyms given in each sentence. Choose the word which is correct for the meaning of that sentence. Write the correct answers on another piece of paper.

The first sentence will show you how to complete the exercise.

Example: They built a fire in the woods and cooked a tender, juicy (steak) (~~stake~~).

1. Open your book and (read) (reed) the first story.
2. The child's curly (hair) (hare) covered her head with soft ringlets.
3. The frightened (deer) (dear) bounded into the woods.
4. The coal glowed in the (great) (grate).
5. The word is correct, do (not) (knot) change it.
6. We must do all in our power to keep our country at (piece) (peace).
7. The (not) (knot) was so tight that it took (great) (grate) patience to untie it.
8. The (night) (knight)'s horse was a beautiful white charger.
9. Do (not) (knot) (steel) (steal), for it is dishonest.
10. The (read) (reed)s growing by the fence were as tall as the (stake) (steak)s of the fence.
11. A ragged (piece) (peace) of cloth was torn from the coat.
12. A (hair) (hare) is usually larger than a rabbit.
13. Follow the (road) (rode) by the mill; that is the (write) (right) (way) (weigh) to go.
14. For several (weak) (week)s after her illness, she felt very (weak) (week).

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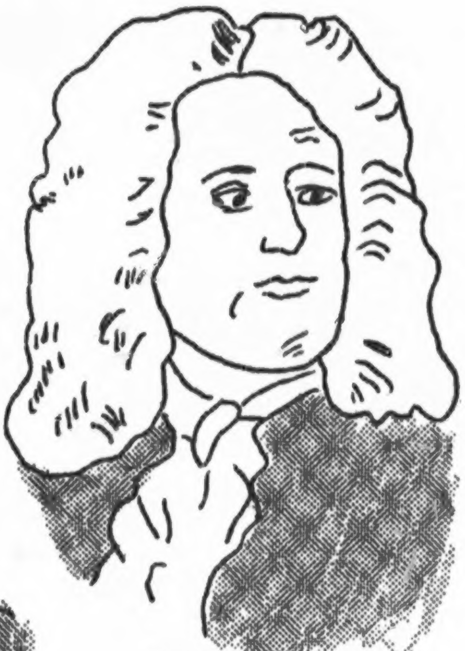
FOUR GREAT COMPOSERS

Can you match the composer with his biography? Write your answers on another piece of paper.

#6

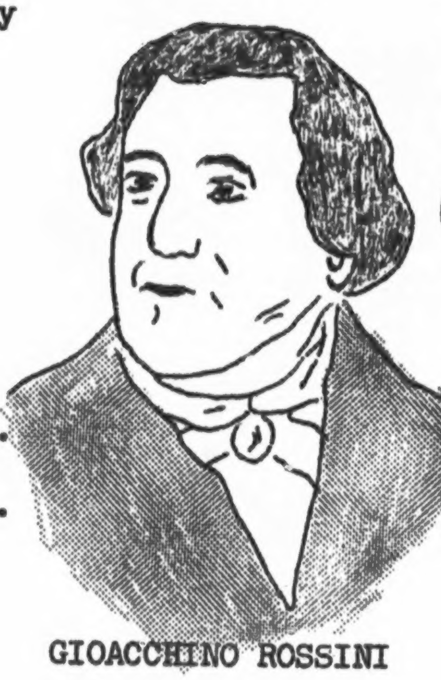
I was born in Halle, Germany, in 1685, but wrote some of my most famous works in England, including "The Messiah." I was influenced by both Italian and German music.



GEORGE HANDEL

#7

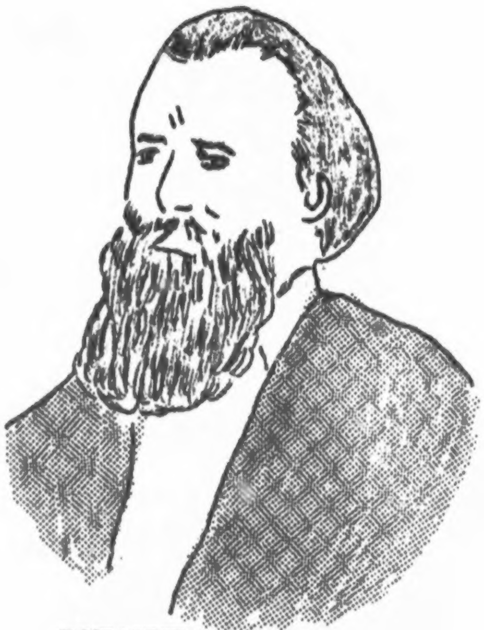
Born in 1792 in Italy, I am famous for my light, gay, and witty music. "The Barber of Seville" and "William Tell" are two of my works.



GIOACCHINO ROSSINI

#8

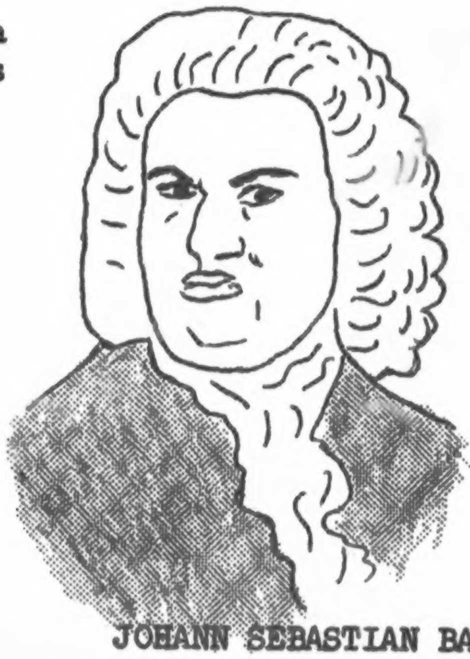
A good friend of Robert and Clara Schumann, I wrote four symphonies and many songs. "My Wiegenlied" (lullaby) has been popular through the years.



JOHANNES BRAHMS

#9

A German, born in 1685, I wrote much church, chamber, and organ music. I also composed the "Christmas Oratorio" and "St. Matthew Passion." Festivals are now held in my honor at Bethlehem, Pennsylvania.



JOHANN SEBASTIAN BACH

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S5 - R - 1

READING

Write your answers on another piece of paper.

Ro͞o′–fəs

ī ăm tāk′–ing mī kĭt′n
to vĭ′sĭt ŦHə fâr,
and ī ăm ex–pek′·tĭng
hē’l tāk ə prīz thâr.

hē ĭz pŭr′·zhen ănd rŭs′ti
ănd dān′·tĭ·li proud;
hĭz fŭr ĭz ăz flŭ′·fĭ
ănd sôft ăz ə cloud.

thâr mā bē ang·gô′rəz
ôr yĕt sī′·ə·mēz′,
kəm·pēt′·ĭng fôr rĭb′·ənz
ănd stĭl môr ŦHăn ŦHēz.

bŭt ī ăm sho͝or ro͞o′fəs
wĭl wĭn wĭŦH·out′ fāl,
hwĕn ŦHə jŭj′·əz kăch sīt
ov hĭz bu′·tə·fal tāl.

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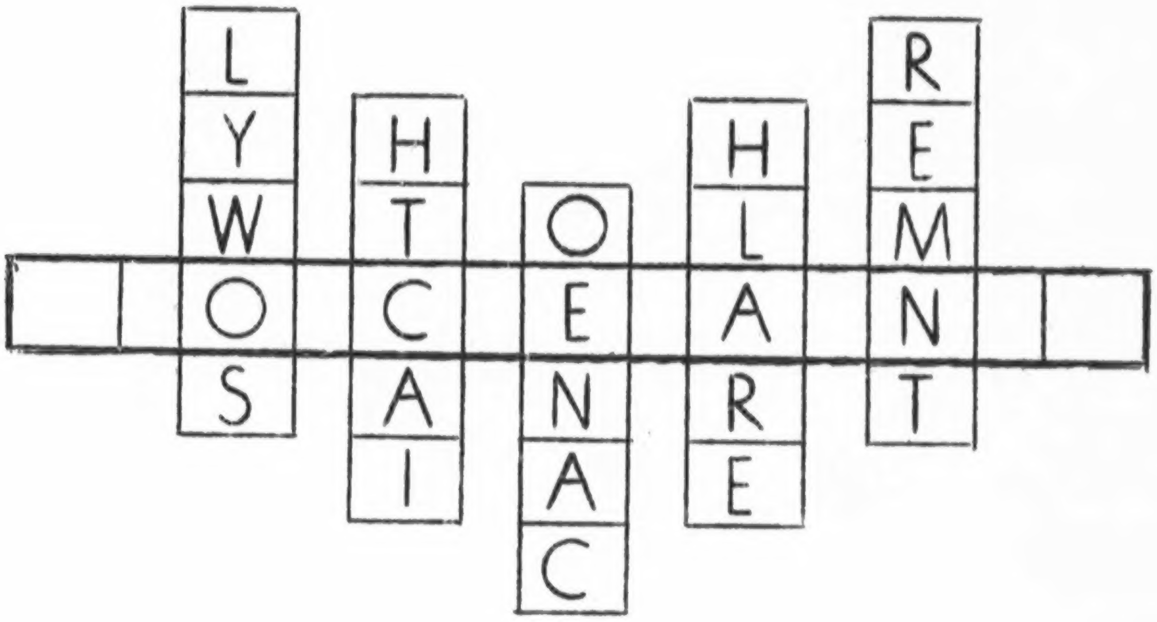
In5-S-C-En-55

STRIP-WORD PUZZLE

Here are five lettered paper strips arranged so they can be pulled up or down to make words in the black display frame. They are now "set" for the word OCEAN in the frame.



Find five more words relating to the OCEAN, by pulling these strips up and down in your mind, to make the correct letters appear in the spaces. Write your words on another piece of paper.

1. ____________

2. ____________

3. ____________

4. ____________

5. ____________

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6-24-63

S5 - R - 3

KNOW YOUR AUTHORS

In your reading enrichment book, Enchanted Isles, there are many well-known stories by famous authors who have written books, stories, and poems especially for boys and girls.

Very often when we read a story we like, we want to enjoy more stories by the same author, so it's a good idea to Know Your Authors.

From the brief résumés below see if you can find the name of the author or poet and the story or poem. You will have to know your book Enchanted Isles, too.

Have fun! Write your answers on another piece of paper.

1. He was the son of a poor Danish cobbler. He grew up in poverty, but fame opened doors to select circles to him. His folk and fairy tales are known throughout the world. His story in this book is really his autobiography. The story tells about an animal that was rejected. Everyone thought he would never amount to anything; but when he grew up, he found that he was thought of very highly.

   A. Who is the author?______________________________

   B. Title of the story.______________________________

2. He comes from a family of three generations of army officers. He graduated from Yale University, studied in Paris, and worked as a free-lance writer. He lived in Pennsylvania, California, Rhode Island, and New York. He married a Chicago girl he met while studying in Paris. He and his wife have written many poems together. The one in this book tells about the first English baby born in this country. It also tells about the "lost colony."

   A. Who is the poet?______________________________

   B. Title of the poem.______________________________

3. He taught Greek at the University of Chicago and later became a columnist for two Chicago newspapers. His wife teaches high-school Latin and has written magazine articles. Their small daughters thought they had enough of books with historical backgrounds, so the parents wrote a book about a "gentleman" from the South Pole. This gentleman lived in a refrigerator.

   A. Who are the authors?______________________________

   B. Title of the story.______________________________

4. He was the son of a newspaper editor, was born in San Francisco, but later moved to Massachusetts. He studied at Dartmouth and Harvard, tried farming, taught, served as a lecturer and had written much poetry. He died recently. He won the Pulitzer Prize four times. He wrote many poems about everyday events. His poem in this book is about what a bird does to some snow and how it makes a person feel better.

   A. Who is the poet?____

   B. Title of the poem.____

5. He was born in New York. He studied at the New York School of Fine and Applied Arts and illustrated for magazines. His first story was Ben and Me, an amusing biography of Benjamin Franklin told by a mouse called Amos. He won the Newbery Medal in 1944 for the story he wrote in this book. The story is about talking animals who are expecting new folks to come to their hill.

   A. Who is the author? ____

   B. Title of the story.____

6. He was born in Bombay, India. He learned Hindustani along with English and became familiar with Indian folk tales. He was sent to England at the age of six for his education. He is a great story-teller and wrote books especially for children, one of which is Jungle Books. The story in this book tells how a great change was made in a great animal.

   A. Who is the author?____

   B. Title of the story.____

S5 - R - 4

READING

Read the words in each line, and think how they make you feel. Select the word that most nearly expresses how you feel.

Write your answers on another piece of paper.

1. wiggly — crawly — creatures — damp — dark — creepy — twisting
   How do the words make you feel?

   cross   angry   shivery

2. fierce beast — loose — keepers run — crowd scatters — screaming "police"
   How do the words make you feel?

   quiet   alarmed   sad

3. silvery airplane — smooth — flying swiftly — high — look far and wide
   How do the words make you feel?

   thrilled   unhappy   hot

4. struggle — push — through bushes — thorn scratches — aches — heat
   How do the words make you feel?

   delighted   tired   happy

5. oh! goodness — how wonderful — thanks — didn't expect — lovely
   How do the words make you feel?

   lonely   puzzled   surprised

6. chewy — chocolate covered — candy — nutty filling — delicious — taste
   How do the words make you feel?

   worried   hungry   awful

7. sticky — scratchy — hot — hoarse — dirty -- crawly — damp — aching
   How do the words make you feel?

   excited   unpleasant   silly

8. dark sky — thunder crashing — rain pours — wind roaring — tree falling
   How do the words make you feel?

   terrified   safe   angry

9. bed — darkness — woolen blankets -- soft pillow — silent house — night
   How do the words make you feel?

   sleepy   joyful   giggly

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S5 - R - 5

SCOUTING THE PICTURE

Use the dictionary to help you answer the questions.

Write your answers on another piece of paper.

Not At Home On The Range

It was the first time that Mary had ever visited her cousin Jim on the ranch, and Jim was anxious for her to have a good time.

"How would you like to go to a box supper at the schoolhouse Saturday night?" Jim asked Mary one day. "Our neighbors for miles around will be there."

"That sounds like fun," Mary accepted. "Good," said Jim. "We'll take one of the buckboards."

"Are they neighbors of yours?" Mary wanted to know.

"Are who neighbors?" Jim asked.

"Why, the Buckboards," Mary answered.

WHAT WAS JIM TALKING ABOUT?

Old Timer

Old Timer, his evening chores done, sat on the stoop of the bunkhouse playing a lonesome little tune on a rusty harmonica. As he played he made up in his head words to go along with the tune. Old Timer was homesick as his song shows:

"I've been 'round these parts long, long enough, now. One day soon I'm fixin' to saddle up Old Paint and I'm a-goin' to head back home. Back where I used to fish the old Missouri. Back to the state where the Missouri River starts.

WAS OLD TIMER FIXIN' TO HEAD FOR MISSOURI WITH OLD PAINT?

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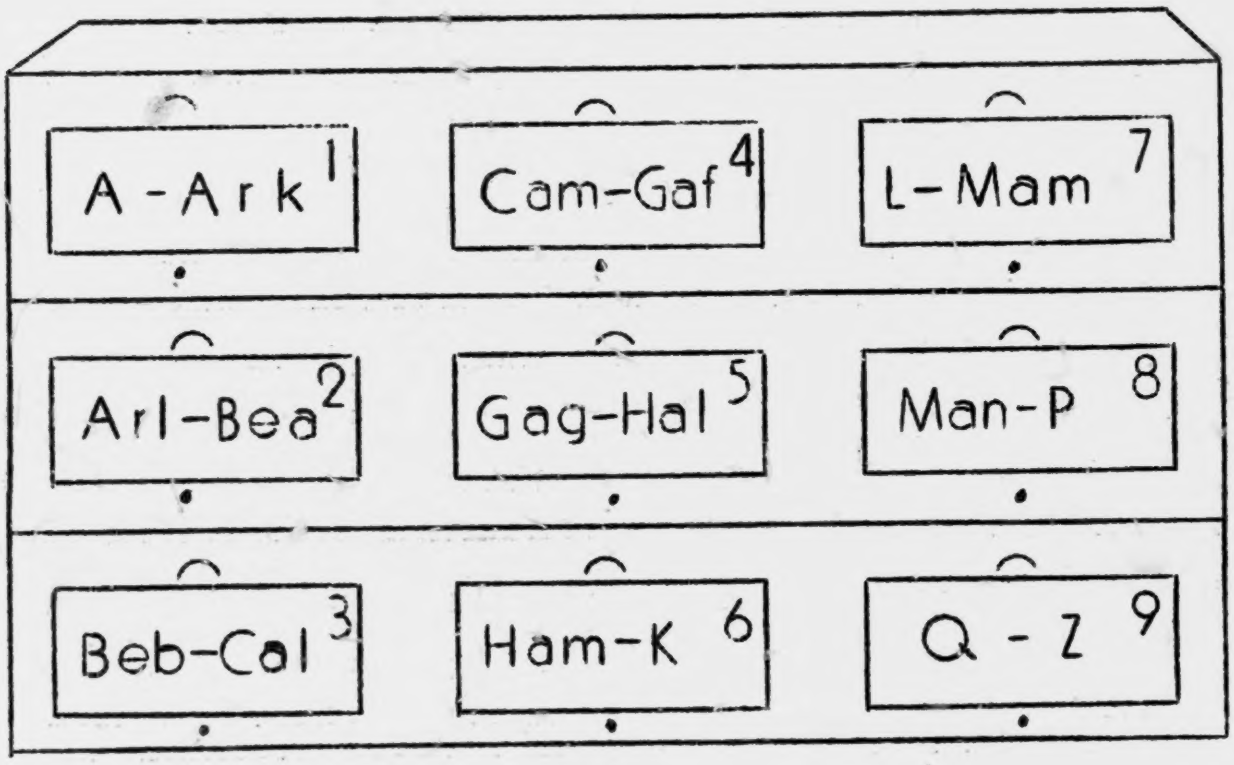
S5 - R - 6

Reference: Children's Book on How to Use Books and Libraries,
chapters 12, 13 and 14

USING "OUTSIDE GUIDES" OF THE CATALOG

By using the "outside guides" from the illustrations below, write the number of the drawer in which each of the following author, subject, and title cards may be found. Write your answers on another piece of paper.

1. Drawer Number 6 In Old California (Title)
2. Drawer Number ______ Elsa Beskow (Author)
3. Drawer Number ______ Bees (Subject)
4. Drawer Number ______ Little World Children (Title)
5. Drawer Number ______ The Story of Doctor Dolittle (Title)
6. Drawer Number ______ Abraham Lincoln (Subject)
7. Drawer Number ______ V. M. Hillyer (Author)
8. Drawer Number ______ Nixie Bunny in Manners Land (Title)
9. Drawer Number ______ An Engine's Story (Title)
10. Drawer Number ______ George Washington (Subject)
11. Drawer Number ______ James Otis (Author)
12. Drawer Number ______ Log Cabin Days (Title)



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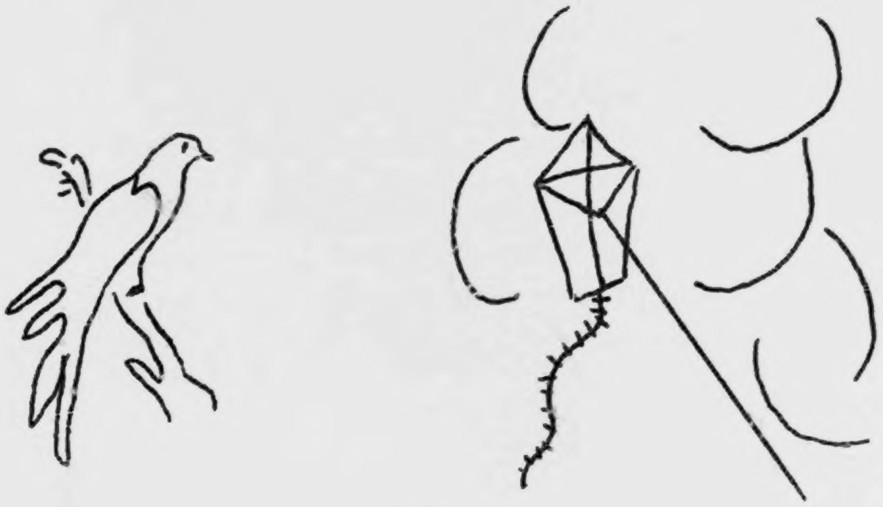
S5 - R - 7

FINDING THE RIGHT MEANING OF A WORD FROM THE DICTIONARY



Kites

Use the dictionary to find one word which may be used in the place of the underlined word in each sentence be[illegible] For each word be sure that you read all the meanings given in the dictionary to find the right word to fit the meaning of the word in the sentence. Write your answers on another piece of paper.

1. The compact we have is to do our best on this lesson.___ agreement ________
2. She put her clothes into the suitcase in the most compact way.____________
3. What is the name of the company for which he works?__________________
4. We had company for dinner.______________________________________
5. The rough weather caused the boat to list.________________________
6. The kind old German lady gave the boy a mark to use as he wished.________
7. Robin Hood could always hit the mark. ____________________________
8. How many knots an hour can the fastest boat make?__________________
9. John brought in the mail that the postman delivered.________________
10. The knight put on his coat of mail.______________________________

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6-25-63

S5 - R - 8

TAKING NOTES

Turn to the chapter "The 'John Newbery Medal' Books" on page 105 of The Children's Book on How to Use Books and Libraries and complete the following outline. Write your answers on another piece of paper.

I. Worthwhile children's books tell of

A.

B.

C.

D.

E.

F.

G.

H.

I.

J.

II. Frederick Melcher's work

A. Started plan of ______________________________

B. Started ______________________________ prize.

III. "John Newbery Medal"

A. Named for ______________________________

B. Awarded once a ______________________________

IV. Awards

A. First, in 1922, van Loon, The Story of Mankind

B. Latest, in ______, ______________, ____________________

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S5 - R - 9

DO WORDS ALWAYS MEAN WHAT THEY SAY?

Write your answers on another piece of paper.

1. The cat kept an eye on the dog in the yard.

   put his eye against

   observed closely

2. He was always willing to give anybody a piece of his mind.

   a piece out of his head

   scolding advice

3. From snout to tail, the old fox was a picture of despair.

   had his picture taken in despair

   looked hopeless

4. He fell into a deep slumber and soon was snoring very loudly.

   flopped into bed

   began to sleep soundly

5. He missed his train and had nothing to do for an hour but sit in the station and twirl his thumbs.

   wait impatiently

   spin his thumbs

6. The boy's large ears were a sore point with him.

   caused him to feel unhappy

   were full of pain

7. When he tried to work the lever, his fingers were all thumbs.

   he had only thumbs on his hands

   he was awkward

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S5 - S - 1

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SCIENCE

References: How and Why Series--Books 5 and 6
Wonderworld of Science--Books 5 and 6

Write your answers on another piece of paper.

1. A high pressure area will move toward a low pressure area. (True) (False)
2. "Highs" are areas of fair weather. (True) (False)
3. Fog is considered to be precipitation. (True) (False)
4. Dew is not precipitation. (True) (False)
5. In a high pressure area the winds blow away from the center of the area. (True) (False)
6. In a low pressure area the winds blow toward the center of the area. (True) (False)
7. Cyclones are more dangerous than tornadoes. (True) (False)
8. Typhoons occur in the Pacific. (True) (False)
9. Hurricanes occur in the Atlantic. (True) (False)
10. The moon holds water. (True) (False)
11. Thicker coats on animals would indicate that the coming winter will be colder. (True) (False)
12. The sun draws water. (True) (False)
13. The approximate temperature can be determined by counting the chirps of a cricket and doing some simple addition. (True) (False)
14. Oceans heat more rapidly than land. (True) (False)
15. A low pressure area usually means stormy weather. (True) (False)
16. The main headquarters for the Weather Bureau is in Sacramento. (True) (False)
17. Winds in the United States usually blow in an easterly direction. (True) (False)
18. A wind blowing 40-60 miles per hour is called a breeze. (True) (False)
19. A cumulus cloud usually brings rain. (True) (False)
20. A barometer measures temperature. (True) (False)

MR/mi--6-27-63
In5-S-C-En-56

S5 - S - 2

SCIENCE QUESTIONS STRESSING TERMINOLOGY

References: How and Why Series--Books 5 and 6
Wonderworld of Science--Books 5 and 6

1. A ____________________ measures temperature.
2. A ____________________ measures wind direction.
3. A ____________________ measures air pressure.
4. A ____________________ measures wind speed.
5. A dark cloud bringing rain or snow is called a _______________ cloud.
6. The _____________ cloud is a fluffy, fair-weather cloud.
7. The _____________ cloud means probable fair weather for 24 hours.
8. Grey layers of clouds which mean rain is almost sure to come are called ___________ clouds.
9. A wind 40-60 miles per hour is called a ___________.
10. A wind 60 miles per hour and up is called a ____________________.
11. ___________ is frozen rain.
12. ___________ is rain thrown up into cold air by a rush of warm air where it is frozen.
13. The dividing line between two masses of air is called a __________.
14. ___________ air is heavier than ___________ air.
15. ___________ is the average weather of an area or country.
16. ___________, _________, _________ and _________ are all forms of precipitation.
17. ___________ are winds that whirl in a very large radius.
18. ___________ are whirling winds that cause much damage.
19. ___________ or ___________ are violent, straight winds that cause much damage.
20. ___________ might be called a frozen dew.

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S5 - 3 - 3

PLANETS

(Science)

Write your answers on another piece of paper.

1. How fast does light travel?
2. At the above rate, how far would light travel in a year?
3. How far is the sun from the earth?
4. At 186,000 miles per second how long does it take the sun's light to reach the earth?
5. How fast is the earth moving through space?
6. How many miles does the earth travel in its orbit around the sun?
7. Why is the sun a star?
8. Many planets were named after gods. Identify these.

   A. Speed ______________________

   B. King of Gods ______________

   C. Underworld ________________

   D. Beauty ____________________

   E. War _______________________

   F. Sea _______________________

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S5 - S - 4

SCIENCE

Write your answers on another piece of paper.

1. There is a rock that is a food substance. Which rock is it?

2. What are the precious metals?

3. What does karat in jewelry mean?

4. What does sterling silver mean?

5. Which of the precious metals have been used in counterfeiting?

6. What is the difference between karat and carat?

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S5 - S - 5

A QUIZ ABOUT WHERE ANIMALS LIVE

(Science)

"Where Do They Live?"

Here are 20 animals. Can you name the native habitat of each one?

Three choices are given for each question. Only one of the three is correct. Choose the right answers. Write them on another piece of paper.

1. The duckbilled platypus lives in: Africa Brazil Australia
2. The sloth lives in: Europe South America South Africa
3. The giraffe lives in: Burma Africa Australia
4. The gila monster lives in: United States French West Africa Asia
5. The reindeer lives in: Lapland Antarctic Ecuador
6. The lemur lives in: South America Australia Madagascar
7. The hippopotamus lives in: Iran Africa Norway
8. The rhinoceros lives in: India Argentina New Zealand
9. The giant armadillo lives in: U.S.A. South America Italy
10. The orangutan lives in: Indonesia Africa Syria
11. The koala "boar" lives in: Australia India China
12. The anteater lives in: Egypt South America Hawaii
13. The elephant lives in: Africa Turkey Chile
14. The two-humped camel lives in: Arabia North America Central Asia
15. The musk-ox lives in: Canada Russia Chile
16. The gorilla lives in: Burma African Congo Spain
17. The bison lives in: Argentina Alaska United States
18. The tiger lives in: Africa Europe India
19. The giant panda lives in: Samoa China Venezuela
20. The zebra lives in: Africa Madagascar Borneo

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S5 - S - 6

*WHY
do leaves turn in the fall?
can you skate on ice?
does water run off a duck's back?

Write your answers on another piece of paper.

QUESTIONS

1. Blowing on a burning match puts out the flame because it
   a) cools off the match,
   b) blows the flame away from the match,
   c) snuffs out the flame with carbon dioxide.

2. Soap helps clean things by
   a) changing oil and grease into substances soluble in water,
   b) emulsifying oil and grease,
   c) making oil and grease sink.

3. Potatoes are baked, boiled, or fried before eating because
   a) they taste better when cooked,
   b) they supply little food value except when cooked,
   c) they make too much noise when eaten raw.

4. Your refrigerator can't air-condition the kitchen because
   a) the food inside would spoil,
   b) the defroster would overflow,
   c) the heat would have no place to go.

5. The bathmat and the bathroom floor are the same temperature, but your feet are warmer when you stand on the mat because
   a) the mat is a good insulator,
   b) the floor is a good insulator,
   c) the foot is a good insulator.

6. Wool is warmer than cotton because
   a) a sheep needs to stay warmer than a cotton plant,
   b) wool has built-in air pockets,
   c) cotton is so fluffy.

7. Water becomes "flat" when left standing in a glass because
   a) the air in the water escapes,
   b) air has become dissolved in it,
   c) it's just warm.

*by Don Herbert NBC-TV's "Mr. Wizard"
taken from Parade--September 27, 1959

8. You can skate on ice because
   - a) the ice is so hard,
   - b) the runners are sharp and cut tracks in the ice,
   - c) you're not skating on ice--but on water.

9. A pressure cooker cooks quicker because
   - a) it gets hotter than an ordinary saucepan,
   - b) the pressure pushes the heat into the food,
   - c) the heat is held inside.

10. The leaves of many trees turn color in the autumn because
    - a) they freeze,
    - b) they die from lack of food,
    - c) they get heavier as time comes for them to fall off.

11. Water runs off a duck's back because
    - a) the duck shakes it off,
    - b) the duck's back slopes downhill,
    - c) the duck's back is waterproof.

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S5 - SS - 1

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AROUND THE WORLD

Some Geographical Gems

Here are places for you to locate. If you get 14, that's satisfactory, score of 16 is good, 18 to 20 is excellent. Write your answers on another piece of paper.

	Location	Longitude and Latitude
1. Where is Ellis Island?		
2. Where is Dixie?		
3. Where is the Statue of Liberty?		
4. Where is the Rock of Gibraltar?		
5. Where is the Emerald Isle?		
6. Where is the largest state in the Union? . . .		
7. Where is the smallest state in the Union? . .		
8. Where is the city that uses canals as streets?		
9. Where is the largest source of ivory?		
10. Where is the Windy City?		
11. Where is the Cape of Good Hope?		
12. Where is the Bay of Bengal?		
13. Where is the Sphinx?		
14. Where is the Coliseum?		
15. Where is the Gobi Desert?		
16. Where is Borneo?		
17. Where was Christopher Columbus born?		
18. Where are the biggest diamond mines?		
19. Where are the Hawaiian Islands? (Long. & Lat.)		
20. Where are the Alps?		

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In5-S-C-En-57

S5 - SS - 2

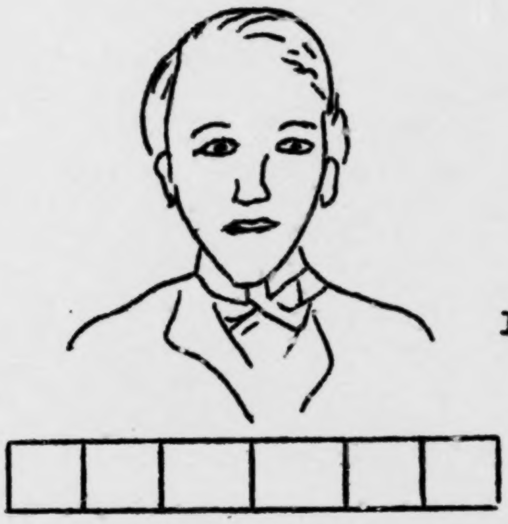
FAMOUS INVENTORS

Can You Recognize Them?

The four men shown have benefited our civilization with their inventions. Do you know who they are?

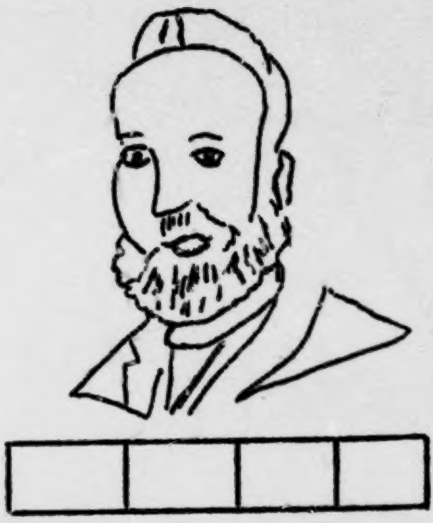
Under each picture you will see the dates that tell you when each man lived. Below this is a row of boxes to show how many letters there are in his name. There are three well-known facts about the man given below each. You may use research materials. When you have finished, write a report on one of your choice.

Write your answers on another piece of paper.



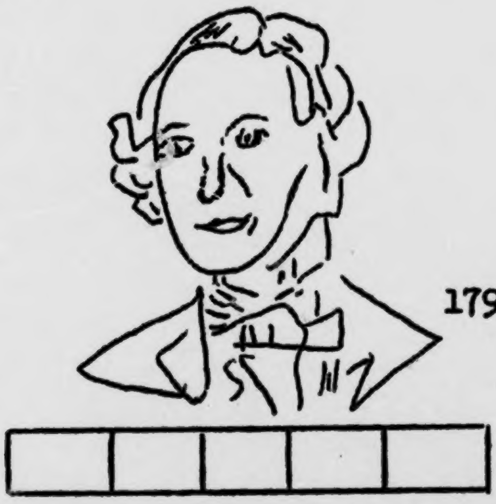
1847-1931

1. He invented the electric light.
2. He invented the phonograph.
3. He was known as the "Wizard of Menlo Park."



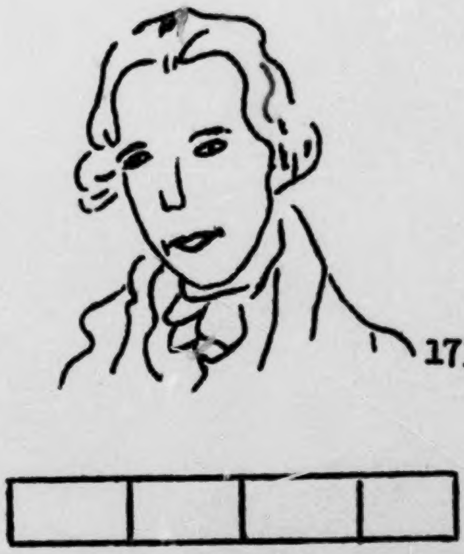
1847-1922

1. He invented the telephone.
2. He spent much of his life teaching deaf people.
3. He was born in Scotland.



1791-1872

1. He invented the telegraph.
2. The code signals used in telegraphy are named after him.
3. He was a painter as well as an inventor.



1736-1819

1. He was a Scotish inventor.
2. He invented the steam engine.
3. A unit of electrical power was named after him.

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S5 - SS - 3

WHICH CAME FIRST?

Write your answers on another piece of paper.

1. ___Mayflower___Viking Ships___Santa Maria

2. ___Leif Ericson___Ponce de Leon___Columbus

3. ___Plymouth___Jamestown___Georgia

4. ___Captain John Smith___James Oglethorpe___Roger Williams

5. ___Anne Hutchison___Pocahontas___Sacagawea

6. ___Lewis and Clark___Marquette and Joliet___Eric the Red

7. ___First President___Boston Tea Party___Revolutionary War

8. ___George Washington___Abraham Lincoln___Thomas Jefferson

9. ___Declaration of Independence___The Constitution___Stamp Tax

10. ___John Hancock___Peter Stuyvesant___Robert Fulton

11. ___Miles Standish___Daniel Boone___Buffalo Bill

12. ___Flatboat___Canoe___Steamer

13. ___Train___Stagecoach___Bus

14. ___Wright Brothers___General Dodge___Robert Fulton

15. ___Covered Wagon___Pony Express___Train

16. ___California___Louisiana Territory___Northwest Territory

17. ___Missouri River___Ohio River___Mississippi River
(To the Pioneers Going West)

18. ___William Penn___Benjamin Franklin___De Soto

19. ___Massachusetts___Ohio___California

20. ___English People___Spanish People___Dutch People
(To the New World)

21. ___St. Louis___Williamsburg___New York City

22. ___Tepees___Brick Homes___Log Cabins

23. ___Central Pacific Railroad___Eric Canal___Santa Fe Trail

24. ___The National Road___Boone's Wilderness Road___California Trail

25. ___Coronado's Search for the Seven Golden Cities of Gibola
___California Gold Rush___Uranium Rush

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S5 - SS - 4

EXPLORERS

(Social Studies)

Write your answers on another piece of paper.

1. Name the seven continents.

a. ______________________ e. ______________________

b. ______________________ f. ______________________

c. ______________________ g. ______________________

d. ______________________

2. Name the five oceans.

a. ______________________ d. ______________________

b. ______________________ e. ______________________

c. ______________________

3. Name three explorers from each country.

Spain	France	England
a. ____________	a. ____________	a. ____________
b. ____________	b. ____________	b. ____________
c. ____________	c. ____________	c. ____________

4. Match the explorer with the deed he accomplished.

Columbus ______________________________

Balboa ______________________________

Amerigo Vespucci ______________________________

Magellan ______________________________

De Soto ______________________________

Ponce de Leon ______________________________

Marquette and Joliet ______________________________

Cartier ______________________________

Champlain ______________________________

Sir Francis Drake ______________________________

John Cabot ______________________________

Henry Hudson ______________________________

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S5 - SS - 5

SOCIAL STUDIES

Write your answers on another piece of paper.

1. What Revolutionary War hero was called the "Swamp Fox?"

2. What was the origin of the name America?

3. What was the name of the flagship on which Columbus sailed across the Atlantic Ocean?

4. Which pioneers in Kentucky were called "Long Hunters?"

5. Which one of the Great Lakes lies entirely within the United States?

6. Why did the Oregon Trail become the chief route to the Northwest in pioneer days?

7. How many days did it take the "Mayflower" to reach America in 1620?

8. What is the United States "Bill of Rights?"

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S5 - SS - 6

EXPLORERS

(Social Studies)

Here are the chief achievements of some not so common explorers. Can you name them? Write your answers on another piece of paper.

1. ____________________ led voyages around world--discovered Columbia River, 1787.

2. ____________________ accompanied Magellan--completed voyage after Magellan's death--kept famous journal.

3. ____________________ discovered Tasmania and New Zealand.

4. ____________________ discovered Lake Albert.

5. ____________________ greatest of African explorers--discovered source of Zambezi River, 1841.

6. ____________________ proved the correct source of Nile--discovered the "Mountains of the Moon."

7. ____________________ first to explore ice fields of Greenland.

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PARALLELS, MERIDIANS, DIRECTION, AND LOCATION

The material below is made up of complete and incomplete statements. As you read the material, try to fill in the words that are missing. Remember to make use of maps, the globe, and any facts that you collect as you read.

Parallels are the lines that run in the same direction as the equator--east and west.

Write your answers on another piece of paper.

1. The longest parallel falls on the ______________________________.

Meridians are the lines that run crosswise to the parallels; meridians run north and south. Meridians do not run parallel with one another.

2. Meridians come together (converge) at the ____________ Pole and the ________ Pole.

3. To review: The equator runs in the same direction as the ________________.

4. The equator and the parallels run _______________ and _________________.

5. Meridians do not run in the same direction as parallels, but run ___________ and ____________________.

6. Meridians do not run __________________ with one another.

7. Meridians converge at the ____________________.

The North Pole and the South Pole are located on the earth's axis.

8. If a person goes true north from any point on the earth's surface, he will end up at the _______________ __________________.

9. If a person goes true south from any point on the earth's surface, he will end up at the _________________ __________________.

The Magnetic North Pole is the direction to which a magnetic needle or compass points.

10. The Magnetic North Pole is located on or near the continent of ____________ _______________.

S5 - SS - 8

MAPS AND GLOBES

Write your answers on another piece of paper.

1. From the point where the International Date Line meets the equator, if you go east, you again will find the continent of

   ____________________ ____________________.

2. After passing South America, if you continue east, you again will find the continent of ____________________.

3. After passing Africa and the island of Madagascar, just off the coast of Africa, if you continue east, you will find the continent of

   ____________________.

4. Now, we have found three of the seven continents--South America, Africa, and Australia. Next, can you find the continent upon which you live. You live in the United States which is a part of the continent called

   ____________________ ____________________.

5. East of North America is the continent of Europe. Adjoining Europe and to the east is the continent of ________________.

6. Now we have found six of the seven continents. We have found South America, Africa, Australia, North America, Europe and Asia. This leaves only one continent to find. This continent is located right at the South Pole. This continent is called

   ____________________________.

7. The closest continent to the continent of Antarctica is

   ____________________ ____________________.

8. The continent next closest is ____________________________.

9. Again, let's find the United States, the country in which we live. The country that is our neighbor to the north is ____________________.

10. The country that is our neighbor to the south is ____________________.

11. Our country, as well as Canada and Mexico is a part of the continent called ____________________ ____________________.

12. The United States has two states that are not attached to the main body of states. These two states are ______________ and ________________.

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OCEANS AND CONTINENTS

There are four oceans in the world. They are called the Pacific Ocean, Atlantic Ocean, Indian Ocean and the Arctic Ocean.

Write your answers on another piece of paper.

1. The Pacific Ocean is bounded by five continents. Those continents are:

L

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

2. The Atlantic Ocean is bounded by five continents. Those continents are:

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

3. The Indian Ocean is bounded by four continents. Those continents are:

a. ____________________

b. ____________________

c. ____________________

d. ____________________

4. The Arctic Ocean is bounded by three continents. Those continents are:

a. ____________________

b. ____________________

c. ____________________

5. What fraction of the earth is water?

____

6. What is the earth's circumference?

____

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T5 - A - 1

Name___________________________ Arithmetic

Date___________________________ Student Lesson Sheet

MEASURES

(Look them up)

Write your answers on another piece of paper.

1. Abraham Lincoln said, "Fourscore and seven years ago . . ."

   How long is fourscore and seven years? (87 years)

2. The giant had seven league boots.

   How far is seven leagues? (21 miles)

3. "I will return in a fortnight."

   How long is a fortnight? (Two weeks)

4. The shipwreck lay in 15 fathoms of water.

   How deep is 15 fathoms? (102 feet)

5. Noah's Ark measured 300 cubits in length, 50 cubits in width, and 30 cubits in height.

   How long is a cubit? (18 to 20 inches)

6. At the Kentucky Derby, horses are raced on a track 10 furlongs in length.

   How long is a furlong? (1/8 of a mile)

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In5-T-C-En-53a

T5 - A - 2

FINDING ADDENDS FOR A GIVEN SUM

Write your answer on another piece of paper

(9, 8, 7)   (6, 5, 4)   (3, 2, 1)

1. Choose 3 numbers, one from each ring, so that the sum is 18.

Ans. (9 + 6 + 3 = 18)

2. Follow the instructions in No. 1 to make three sums of 17.

Ans. (9 + 6 + 2 = 17)   (9 + 5 ÷ 3 = 17)   (8 + 6 + 3 = 17)

3. Follow the instructions in No 1. to make six sums of 16.

Ans. (9 + 6 + 1 = 16)   (9 + 4 + 3 = 16)   (8 + 5 + 3 = 16)
(9 + 5 + 2 = 16)   (8 + 6 + 2 = 16)   (7 + 6 + 3 = 16)

(9, 8)   (7, 6)   (5, 4)   (3, 2)

4. Choose 4 numbers, one from each ring, so that the sum is 24.

Ans. (9 + 7 + 5 + 3 = 24)

5. Follow the instructions in No. 4 to make six sums of 22.

Ans. (9 + 7 + 4 + 2 = 22)   (8 + 7 + 4 + 3 = 22)   (8 + 7 + 5 + 2 = 22)
(9 + 6 + 4 + 3 = 22)   (9 ÷ 6 + 5 + 2 = 22)   (8 + 6 + 5 + 3 = 22)

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T5 - A - 3

ARITHMETIC QUICKIES

Write your answers on another piece of paper.

1. If eggs are 26¢ a dozen, how many can you buy for a cent and a quarter?

   Ans. one dozen (A quarter = 25¢.)

2. If it takes 3 minutes to boil an egg, how many minutes will it take to boil 3 eggs?

   Ans. 3 minutes (Boil all eggs together.)

3. A bottle and a cork cost $1.10. The bottle cost $1.00 more than the cork. What did each cost?

   Ans. bottle $1.05, cork $.05

4. How many telephone poles are necessary to reach the moon?

   Ans. Only one is necessary if it is long enough.

5. An empty barrel weighs 10 pounds. What can you put in the barrel to make it weigh 9 pounds?

   Ans. holes

6. A man wants to build a fence along one side of his yard. The distance is 60 feet. How many posts will it take if he places them 10 feet apart?

   Ans. seven (one at each end and 5 between)

7. Write twelve thousand twelve hundred twelve.

   Ans. 13,212 (12,000 + 1,200 + 12)

8. I have two current United States coins. Together they total 55¢. One is not a nickel. What are the coins?

   Ans. a half dollar and a nickel (The half dollar is not a nickel.)

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T5 - A - 4

SPACE-AGE ARITHMETIC

Write your answers on another piece of paper.

1. On the moon, objects weigh about one-sixth of what they do on earth. If your brother weighs 108 pounds, on the moon he would weigh: (a) 18 pounds; (b) 108 pounds; (c) 678 pounds

2. The farthest the moon gets from the earth is 252,710 miles. The nearest it comes is 221,463 miles. How much shorter is the trip if you wait until the moon is at its nearest point? (a) 3,247 miles; (b) 347 miles; (c) 31,247 miles

3. Your rocket vehicle is traveling at 160 miles a minute. The pilot sees an object straight ahead. It takes him 3 seconds to see, decide and start acting. How far have you traveled in those 3 seconds? (a) 8 miles; (b) 53 1/3 miles; (c) 3 miles

4. When the Atlas rocket went into orbit, it was circling the earth once every hundred minutes. Traveling at that rate, how many times would you go around the world in 80 days? (There are 115,200 minutes in 80 days.) (a) 115; (b) 1,152 (c) 117

5. The pull of gravity on the moon is one-sixth of what it is on earth. If you can jump 6 feet on earth, on the moon you could jump: (a) only 1 foot; (b) 6 yards; (c) 36 feet

6. Traveling at about 18,000 miles an hour, it took Russia's Sputnik I about 1 3/5 hours to circle the earth. How many miles was the satellite traveling in one trip around the earth? (a) about 12,000 miles; (b) about 29,000 miles; (c) about 18,000 miles

7. Radio waves, like light waves, travel at 186,000 miles a second. If you got to the moon and wanted to send a message back to your family, how long would it take your radio message to reach the earth, a quarter of a million miles away? (a) less than a half a second; (b) about 1 hour, 15 minutes; (c) between 1 and 2 seconds

8. The moon weighs about 81 quintillion tons. This number is written: (a) 81,000,000; (b) 81,000,000,000; (c) 81,000,000,000,000,000,000

9. The moon always keeps the same side turned toward the earth. Because of slight rocking, 59 per cent of its surface has been seen from the earth. What per cent of the moon's surface has never been seen from the earth? (a) 50 per cent; (b) 41 per cent; (c) 61 per cent

10. The pull of gravity on the planet Jupiter is almost 2 2/3 times what it is on earth. If your brother, weighing 108 pounds, now decides to go to Jupiter, about how much would he weigh there? (a) almost 36 pounds; (b) about 110 2/3 pounds; (c) almost 288 pounds

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T5 - A - 5

CAN YOU ADD?

Write your answers on another piece of paper.

1. You go to the corner grocery store with eight deposit bottles valued at 37¢ and buy groceries priced at $2.68. How much change do you get from a $5 bill? Ans. $2.69

2. Let's suppose the clerk at your neighborhood delicatessen specializes in illegible bills, and has just scrawled the amounts below on a paper bag. What do they total?

1.26	$ 1.26
48	.48
61	.61
25	.25
1.75	1.75
27	.27
100	1.00
Ans.	$ 5.62

3. Here is a chance to test your mental arithmetic. How much is 27 plus 76? Ans. 103

4. You receive an orange and black turtleneck sweater for your birthday and decide to exchange it. At the store, you're handed a merchandise credit slip for $11. You select a sweater for $8.95 and also buy a shirt for $4.98. How much cash do you actually pay out? Ans. $2.93

5. A man bought groceries that cost $2.49. He gave the clerk a $10 bill. How many of each of these currency items would be returned to the man as change?
$5(1) $1(2) 50¢(1) 25¢( ) 10¢( ) 5¢( ) 1¢(1)

6. At the supermarket you get one blue stamp valued at a tenth of a cent for each 10¢ purchase. How many groceries must you buy to get an electric toaster priced in the catalog at $17.50? Ans. $1,750

7. Cab fare from the station is 50¢ and you decide to tip the driver 15¢. Because you have only 20¢ in nickels, you give him a dollar bill and ask for change. But the driver has only a half dollar in change. How do you solve this predicament? Ans. Give driver $1.15--get 50¢ change

8. To call your grandmother across the continent, you need 55¢ for the first three minutes and 15¢ for each additional three minutes. You have never completed this call in less than 17 minutes. What is the minimum number of coins you'll need? Ans. 5

9. Because you favor "small, uneconomical" purchases, you decide to pay a penny extra and buy only one of each of these items at a supermarket sale:

asparagus	2 cans for 23¢
soup	4 cans for 47¢
soda	3 bottles for 29¢
coffee	2 cans for $1.99

What does your bill total? Ans. $1.34

10. Arthur's wife Miriam collects traffic tickets the way some people collect stamps. Her latest acquisitions include: two speeding tickets ($10 each), one ticket for passing a red light ($5), and four tickets for parking ($3 each). Arthur agrees to pay for all the tickets but tells Miriam he's going to deduct $2.50 from her $45 weekly household allowance until the tickets are paid for. How many weeks must Miriam tighten her belt? Ans. 15 weeks

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T5 - A - 6

USING NEW SYMBOLS

In examples 1-26, write **T** for each statement that is correct, and **F** for each statement that is not correct. **Write your answers on another piece of paper.**

T 1. 6 + 8 = 14

T 2. 12 - 4 = 8

T 3. 8 + 4 = 9 + 3

F 4. 11 - 3 = 9 - 2

F 5. 9 + 8 - 7 = 1 + 4 + 5 + 1

T 6. 2 + 3 + 4 = 10 - 1

F 7. 5 + 11 = 15

T 8. 16 - 9 = 7

T 9. 9 + 8 = 11 + 6

T 10. 15 - 6 = 12 - 3

T 11. 12 - 8 = 3 + 1

T 12. 6 + 7 = 15 - 2

T 13. 9 + 12 = 21

F 14. 21 - 13 = 7

F 15. 10 + 4 = 7 + 6

T 16. 19 - 4 = 15 - 0

F 17. 21 + 2 = 16 + 6

T 18. 15 - 3 = 6 + 6

Remember there is often a number name, such as 6, that is easier to use than a number name in parentheses as (2 + 4).

T 19. (2 + 4) + (8 + 2) = 16

T 20. 8 + (7 - 2) = (8 + 7) - 2

T 21. 6 + n = 15 if n = 9

F 22. 11 + n = 14, if n = 2

T 23. n + n = 16, if n = 8

T 24. n - 4 = 11, if n = 15

F 25. 15 - n = 9, if n = 7

F 26. 17 - n = 8, if n = 7

There is a symbol to show that numbers are not equal. It is ≠. We write 8 ≠ 6. We read this as 8 is not equal to 6.

In exercises 27-38, write = or ≠ on each blank.

27. 9 + 3 = 12

28. 15 + 2 = 19 - 2

29. 25 - 4 ≠ 20

30. 17 - 0 ≠ 2 + 3 + 4

31. 16 + 9 ≠ 26 + 0

33. (4 + 5)-7 = 2 + (5 - 5)

34. 18 - n = 7 + 2, if n = 9

35. 25 + n ≠ (16 + 16) + 1, if n = 7

36. 18 -(7 + 1) ≠ 5 + (3 + 1)

37. 16 + n = 26 - n, if n = 5

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ANSWERS TO ARITHMETIC SYMBOLS

ADD:

1. 6 or △
2. 8 or 1○
3. 6 or △
4. 10
5. 9
6. 6
7. 16
8. 12
9. 9

SUBTRACT:

1. 4 or ▯
2. ○
3. 6
4. 4
5. 6
6. 7
7. 6
8. 8
9. 14

MULTIPLY:

1. 30
2. 6
3. 12
4. 20
5. 1
6. 16
7. ○
8. 20
9. 16

DIVIDE:

1. 2
2. 3
3. 4
4. 1
5. 4
6. 3
7. ○
8. 5
9. $1\frac{1}{2}$

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T5 - A - 8

ARITHMETIC

Copy the numerals 1-15 on your paper. Next to each, write the correct words or numerals to complete this chart.

	Numbers Operated On	Result	Operation Used	Mathematical Sentence
1.	12, 9	3	Subtraction	12 - 9 = 3
2.	18, 9	9	Subtraction	18 - 9 = 9
3.	6, 3	9	Addition	6 + 3 = 9
4.	5, 8	40	Multiplication	5 x 8 = 40
5.	18, 3	6	Division	18 ÷ 3 = 6
6.	6, m	13	Addition	6 + m = 13
7.	p, 7	6	Subtraction	p - 7 = 6
8.	3, 7, 4	14	Addition	3 + 7 + 4 = 14
9.	14, t	8	Subtraction	14 - t = 8
10.	12, 7	5	Subtraction	12 - 7 = 5
11.	15, 9	6	Subtraction	15 - 9 = 6
12.	3, 14	17	Addition	3 + 14 = 17
13.	12, 4	3	Division	12 ÷ 4 = 3
14.	5, 3	15	Multiplication	5 x 3 = 15
15.	6, 2	4	Subtraction	6 - 2 = 4

Copy each mathematical sentence below. Fill in the correct answer, "less than," "more than," or "equals."

1. (8 + 4) > 11
2. (1 + 3) < 9 + 1
3. (2 x 3) < 3 x 3
4. 2 + 7 = 11 - 2
5. (2 + 3)+4 = 1 + (5 + 3)
6. (3 x 4) > (2 x 5)

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T5 - A - 9

ARITHMETIC

Which of the following statements are true and which are false? **Write your answers on another piece of paper.**

F 1. $3 \times 5 > 16$

T 2. $3 \times 5 \neq 16$

T 3. $1 + 1 > 1 \times 1$

T 4. $6^3 > 5^3$

F 5. $8^2 \neq 2^6$

F 6. $173 + 379 < 11 \cdot 52$

T 7. $10^5 > 10,000$

T 8. $2^5 = 32$

F 9. $12^2 \neq 144$

T 10. $2^{10} = 4^5$

T 11. $3 \times 5 < 16$

F 12. $3 \times 5 = 16$

T 13. $18 \cdot 2 = 6^2$

T 14. $2^{10} > 10^3$

T 15. $3^2 < 2^3$

F 16. $8 < (173-97) \times 0$

T 17. $4^3 < 3^4$

T 18. $11^2 = 121$

T 19. $12 \times 13 < 13^2$

T 20. $173 \cdot 174 > 173^2$

Example:

When a number is to be multiplied by itself several times we abbreviate as shown by these examples:

$2 \times 2 \times 2 = 2^3 = 8$, 2 to the third power

$4 \times 4 \times 4 = 4^3 = 64$, 4 to the third power

$5 \times 5 = 5^2 = 25$,

$10 \times 10 = 10^2 = 100$,

$10 \times 10 \times 10 \times 10 = 10^4 = 10,000$, etc.

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T5 - A - 10

ARITHMETIC

Which of the following statements are true and which are false? Write your answers on another piece of paper.

$\underline{\;F\;}$ 1. $3 \times 5 > 16$

$\underline{\;F\;}$ 2. $4 \times 5 < 16$

$\underline{\;T\;}$ 3. $3 \times 5 \neq 16$

$\underline{\;T\;}$ 4. $3 \times 5 = 15$

$\underline{\;T\;}$ 5. $1 + 1 > 1 \times 1$

$\underline{\;T\;}$ 6. $18 \cdot 2 = 6 \times 6$

$\underline{\;F\;}$ 7. $6 \times 5 > 5 \times 8$

$\underline{\;F\;}$ 8. $2 \times 9 > 7 \times 4$

$\underline{\;T\;}$ 9. $9 + 7 \neq 10 + 3$

Copy each mathematical sentence below. Fill in the "less than," "greater than," or "equals," sign in order to make a true statement.

1. $(3 \times 9) \underline{\;\;<\;\;} (6 \times 8)$
2. $(12 + 50) \underline{\;\;>\;\;} 59$
3. $(20 + 15) \underline{\;\;=\;\;} (10 + 25)$
4. $(8 + 3 + 2) \underline{\;\;<\;\;} (7 + 5 + 2)$
5. $(24 - 2) \underline{\;\;>\;\;} (3 \times 7)$
6. $(18 - 6) \underline{\;\;=\;\;} (9 + 3)$
7. $(5 + 8 - 3) \underline{\;\;<\;\;} (14 - 7 + 5)$
8. $(6 \times 9) \underline{\;\;=\;\;} (9 \times 6)$

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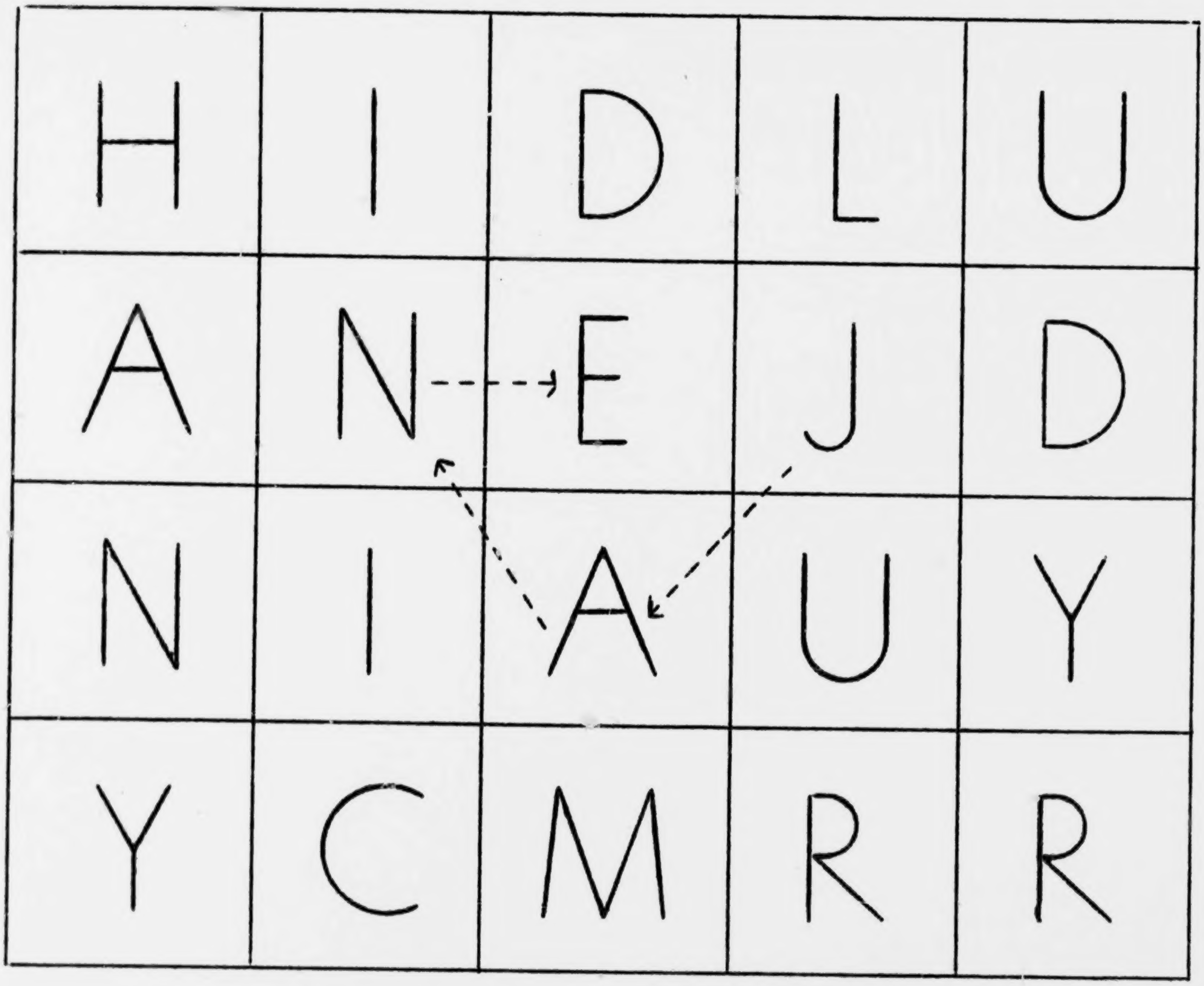
T5 - L - 1

JANE'S PATCHWORK QUILT



H	I	D	L	U
A	N	E	J	D
N	I	A	U	Y
Y	C	M	R	R

The following girl's names can be spelled:

1. Ann
2. Lulu
3. Diana
4. Diane
5. Lena
6. Dinah
7. Edna
8. Maud
9. Hannah
10. Jennie
11. Minnie
12. Anna
13. Mary
14. Nan
15. Nancy
16. Jane
17. Mae
18. Judy

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In-T-C-En-54a

T5 - L - 2

ASK MR. WEBSTER

(Definitions)

1.	ladybird:	ladybug (a small, roundish beetle, reddish with black spots)
2.	dolt:	a dull, stupid person; blockhead
3.	bumpkin:	awkward person from the country
4.	centipede:	a small wormlike animal with many pairs of legs.
	velocipede:	child's tricycle; an early kind of bicycle or tricycle
5.	sobriquet:	nickname
6.	pillion:	a pad attached behind a saddle for a person to sit on
7.	dormant:	sleeping; quiet as if asleep; inactive
8.	regale:	entertain agreeably; delight with something pleasing; entertain with a choice repast; feast
9.	cuisine:	style of cooking; cooking; cookery
10.	dilemma:	a position requiring a choice between two evils; embarrassing or perplexing situation; difficult choice
11.	quadruped:	an animal that has four feet
12.	deport:	behave (oneself) in a particular manner
13.	dodo:	a large clumsy bird not able to fly. Dodos are now extinct.
14.	masticate:	chew
15.	pigment:	a coloring matter

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T5 - L - 3

HUMPTY DUMPTY

Fun with Words

The space between the letters is to be filled with letters that will make words. Write your answers on another piece of paper.

1. b laste d
o unc e
m o b
b otto m
e ch o
d um b

2. s choo l
p ul l
e dg e
l ea p
l eave s

3. p ushe s
r oo m
o nc e
b ow l
l o b
e ch o
m irro r
s lee p

4. m aste r
a nemon e
s pen t
t eam s
e dn a
r edee m

5. w or d
o w l
r oa r
l ott o
d ra w

6. t ea m
h ol e
e dit h
m ois t

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T5 - L - 4

ANTONYMS

Write your answers on another piece of paper.

accept	1.	Jack could not refuse the offer.
work	2.	We have a new game to play.
mountain	3.	The river flowed through the valley.
sorrow	4.	There was a great deal of joy.
question	5.	Do you know the answer.
depart	6.	When will the next train arrive?
evening	7.	We brushed our teeth this morning.
friend	8.	The enemy camp was across the river.
east	9.	The sun sets in the west.
shut	10.	Did you open the window?
false	11.	Is that a true story?
daylight	12.	Bring a flashlight for the dark.
raise	13.	When did they lower the flag?
scatter	14.	Will they pile--gather the grain?
south	15.	The needle points toward the north.
none	16.	Tom has many new pictures.
safe	17.	That is a dangerous corner.
old	18.	Nick is too young to vote.
dry	19.	The grass is still wet.
alike	20.	Those saddles are different.

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T5 - L - 5

ESSAY TO MISS CATHARINE JAY

An essay now I mean to write
  To you sweet Katie Jay,
The girl without a parallel,
  The belle of Utica.

I wonder if you got that one
  I wrote to you before
I sailed in the *Arcadia*
  And sent by Allen Moore.

My empty head will scarce contain
  A calm idea bright
But eighty miles from you I must
  Embrace this chance to write.

And first, should any envy you,
  Be easy, mind it not,
Should any friendship show, be true;
  They should not be forgot.

CHINESE TEA SONG

Oh, come to the tea shop with me,
And buy a pound of the best,
'Twill prove a most excellent tea,
It's quality all will attest.

'Tis only four shillings a pound,
So come to the tea mart and try,
No better can elsewhere be found,
Or that any other need buy.

* * *

DEATH AND LIFE

Top sentence:

A cursed fiend wrought death, disease and pain.

Bottom sentence:

A blessed friend brought breath and ease again.

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T5 - L - 7

PUNCTUATION AND ABBREVIATIONS

		Answers
1.	that is	i.e.
2.	for example	e.g.
3.	which see	q.v.
4.	before noon	a.m.
5.	after noon	p.m.
6.	Mister	Mr.
7.	Mistress	Mrs.
8.	doctor	Dr.
9.	in the year of our Lord	A.D.
10.	before Christ	B.C.
11.	sirs (plural of Mr.)	Messrs.
12.	namely	viz.
13.	mathematics	math.
14.	singular	sing.
15.	pages	pp.
16.	island	is.
17.	cash on delivery	C.O.D.
18.	boulevard	blvd.
19.	territory	terr.
20.	plural	pl.

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T5 - L - 8

MAKE A WORD

Finish each group of sentences with words made from the three syllables at the left. Write your answers on another piece of paper.

fume pep per	We smell the perfume. He spilled the pepper.	whis son per	We heard her whistle. She is the right person.
gry dred hun	We counted one hundred. The boys are hungry.	an swer gry	Do you know the answer? Is Tom very angry?
an wom chor	He lifted the big anchor. Did he see the woman?	bas tle ket	Put the boxes in the basket. What did she pour into the kettle?
pa rade per	Write it on that paper. I want to see the parade.	hor dle rid	Did you guess the riddle? That one looks horrid.
cor din ner	Tom walked to the corner. He is ready for dinner.	can dle han	Did she light the candle? Nell turned the handle.
for est get	We saw deer in the forest. What did Tom forget?	cil o pen	You left the door open. She dropped a pencil.
bit rab ter	Did Jim catch the rabbit? That tea is bitter.	set lit tle	That bench is too little. Where did the pioneers settle?
puz muz zle	We finished the puzzle. The dog wore a muzzle.	REREAD YOUR SENTENCES. HAVE YOU USED THE RULES FOR OPEN AND CLOSED SYLLABLES.	

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T5 - L - 9

AN EXERCISE FOR USING HOMONYMS

In your dictionary find the homonyms given in each sentence. Choose the word which is correct for the meaning of that sentence. Write the correct answers on another piece of paper.

The first sentence will show you how to complete the exercise.

Example: They built a fire in the woods and cooked a tender, juicy (steak) (stake).

1. Open your book and (read) (~~reed~~) the first story.

2. The child's curly (hair) (~~hare~~) covered her head with soft ringlets.

3. The frightened (deer) (~~dear~~) bounded into the woods.

4. The coal glowed in the (~~great~~) (grate).

5. The word is correct, do (not) (~~knot~~) change it.

6. We must do all in our power to keep our country at (~~piece~~) (peace).

7. The (~~not~~) (knot) was so tight that it took (great) (~~grate~~) patience to untie it.

8. The (~~night~~) (knight)'s horse was a beautiful white charger.

9. Do (not) (~~knot~~) (~~steel~~) (steal), for it is dishonest.

10. The (~~read~~) (reed)s growing by the fence were as tall as the (stake) (~~steak~~)s of the fence.

11. A ragged (piece) (~~peace~~) of cloth was torn from the coat.

12. A (~~hair~~) (hare) is usually larger than a rabbit.

13. Follow the (road) (~~rode~~) by the mill; that is the (~~write~~) (right) (way) (~~weigh~~) to go.

14. For several (~~weak~~) (week)s after her illness, she felt very (weak) (~~week~~).

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6-20-63

T5 - MU - 1

FOUR GREAT COMPOSERS

Can you match the composer with his biography? Write your answers on another piece of paper.

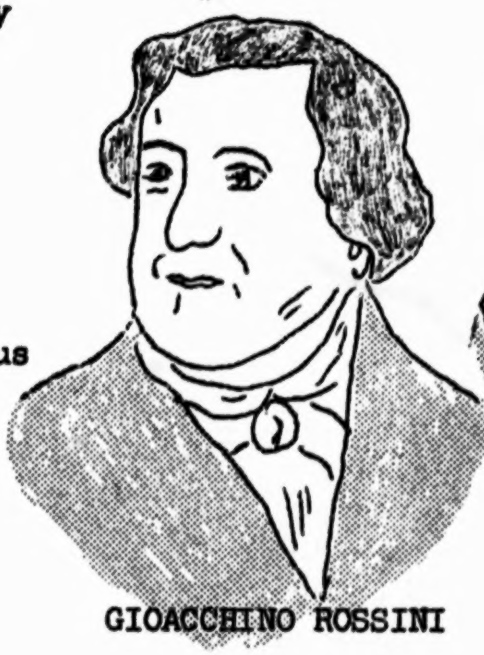
#6

I was born in Halle, Germany, in 1685, but wrote some of my most famous works in England, including "The Messiah." I was influenced by both Italian and German music.

#7

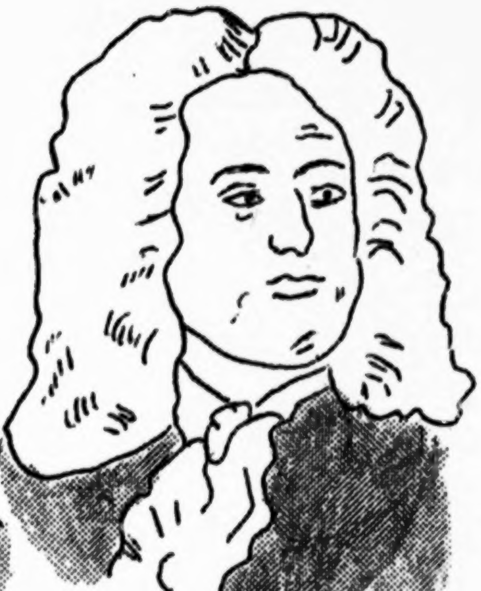
Born in 1792 in Italy, I am famous for my light, gay, and witty music. The "Barber of Seville" and "William Tell" are two of my works.

#7



GIOACCHINO ROSSINI

#6



GEORGE HANDEL

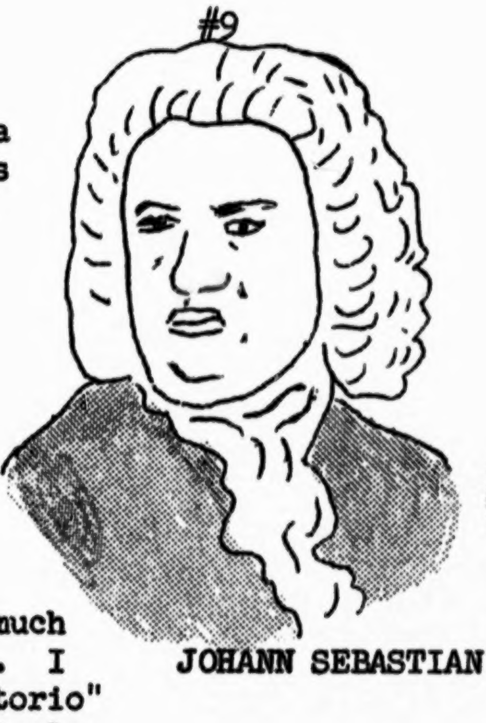
#8

A good friend of Robert and Clara Schumann, I wrote four symphonies and many songs. "My Wiegenlied" (lullaby) has been popular through the years.

#9

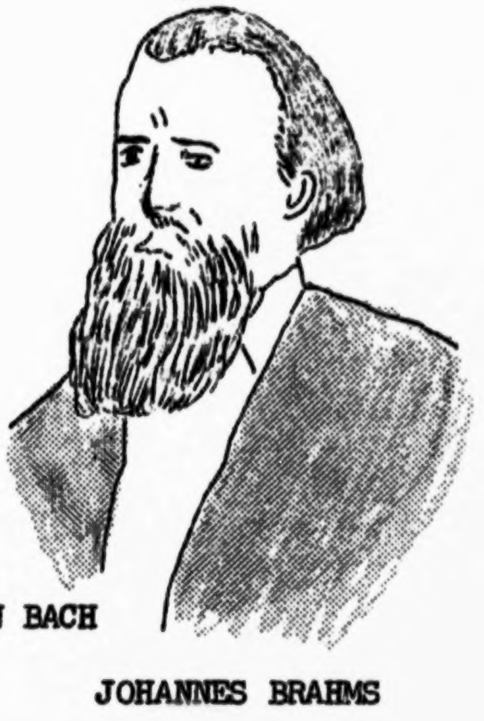
A German, born in 1685, I wrote much church, chamber, and organ music. I also composed the "Christmas Oratorio" and "St. Matthew Passion." Festivals are now held in my honor at Bethlehem, Pennsylvania.

#9



JOHANN SEBASTIAN BACH

#8



JOHANNES BRAHMS

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6-21-63

T5 - R - 1

READING

Write your answers on another piece of paper.

Ro͞o′-fəs	Rufus
ī ăm tāk′-ing mī kĭt′n	I am taking my kitten
to vĭ′sĭt ŦHə fâr,	To visit the fair,
ănd ī ăm ex-pek′·ting	And I am expecting
hē'l tāk ə prīz thâr	He'll take a prize there.
hē ĭz pŭr·′zhən ănd rŭs′tĭ	He is Persian and rusty
ănd dān′·tĭ·lĭ proud;	And daintily proud;
hĭz fŭr ĭz ăz flŭ′·fĭ	His fur is as fluffy
ănd sôft ăz ə cloud.	And soft as a cloud.
thâr mā bē ăng·gô′rəz	There may be Angoras
ôr yĕt sī′·ə·mēz′,	Or yet Siamese,
kəm·pēt″·ĭng fôr rĭb′·ənz	Competing for ribbons
ănd stĭl môr ŦHăn ŦHēz.	And still more than these.
bŭt ī ăm sho͝or ro͞o′·fəs	But I am sure Rufus
wĭl wĭn wĭŦH·out′ fāl,	Will win without fail,
hwĕn ŦHə jŭj′·əz kăch sīt	When the judges catch site
ov hĭz bu′·tə·fal tāl.	Of his beautiful tail.

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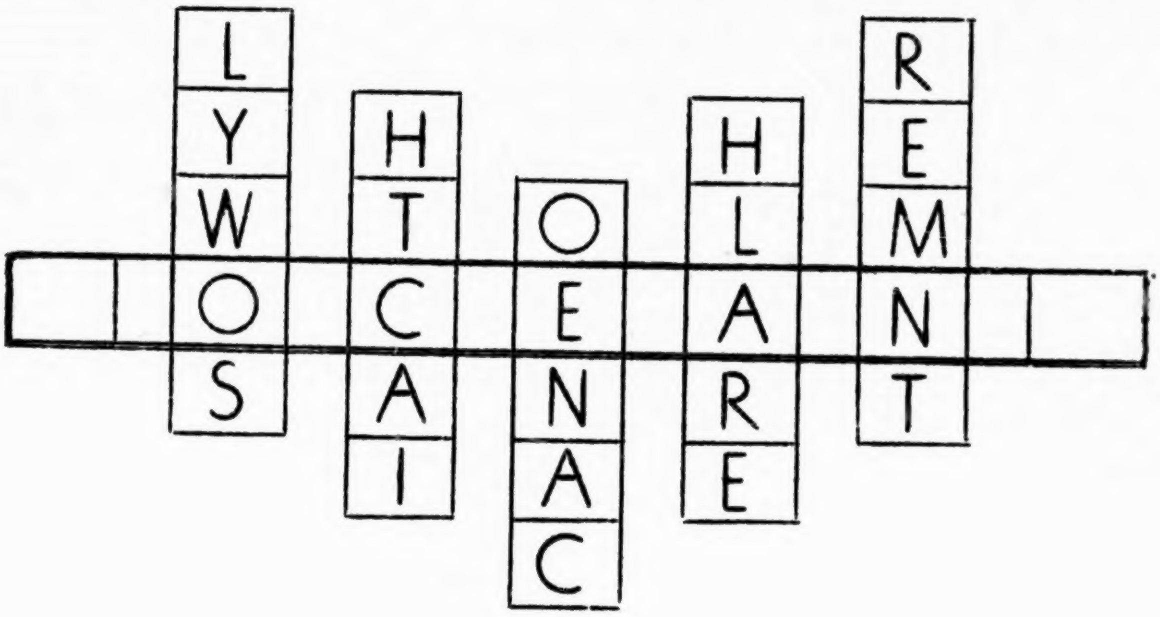
In-T-C-En-55a

T5 - R - 2

STRIP-WORD PUZZLE

Here are five lettered paper strips arranged so they can be pulled up or down to make words in the black display frame. They are now "set" for the word OCEAN in the frame.



Find five more words relating to the OCEAN, by pulling these strips up and down in your mind, to make the correct letters appear in the spaces. Write your words on another piece of paper.

1. SHORE
2. LINER
3. WHALE
4. YACHT
5. STORM

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6-24-63

KNOW YOUR AUTHORS

(Answers)

1. Author: Hans Christian Anderson
   Story: "Ugly Duckling"

2. Poet: Stephen Vincent Benét
   Poem: "Peregrine White and Virginia Dare"

3. Authors: Richard and Florence Atwater
   Story: "Troubles with a Penguin"

4. Poet: Robert Frost
   Poem: "Dust of Snow"

5. Author: Robert Lawson
   Story: "Little Georgie Sings a Song"

6. Author: Rudyard Kipling
   Story: "The Elephant's Child"

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T5 - R - 4

READING

Read the words in each line, and think how they make you feel. Select the word that most nearly expresses how you feel.

Write your answers on another piece of paper.

1. wiggly — crawly — creatures — damp — dark — creepy — twisting
How do the words make you feel?

cross angry shivery

2. fierce beast — loose — keepers run — crowd scatters — screaming "police"
How do the words make you feel?

quiet alarmed sad

3. silvery airplane — smooth — flying swiftly — high — look far and wide
How do the words make you feel?

thrilled unhappy hot

4. struggle — push — through bushes — thorn scratches — aches — heat
How do the words make you feel?

delighted tired happy

5. oh! goodness — how wonderful — thanks — didn't expect — lovely
How do the words make you feel?

lonely puzzled surprised

6. chewy — chocolate covered — candy — nutty filling — delicious — taste
How do the words make you feel?

worried hungry awful

7. sticky — scratchy — hot — hoarse — dirty — crawly — damp — aching
How do the words make you feel?

excited unpleasant silly

8. dark sky — thunder crashing — rain pours — wind roaring — tree falling
How do the words make you feel?

terrified safe angry

9. bed — darkness — woolen blankets — soft pillow — silent house — night
How do the words make you feel?

sleepy joyful giggly

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6-26-63

SCOUTING THE PICTURE

Use the dictionary to help you answer the questions.

Write your answers on another piece of paper.

Not At Home On The Range

It was the first time that Mary had ever visited her cousin Jim on the ranch, and Jim was anxious for her to have a good time.

"How would you like to go to a box supper at the schoolhouse Saturday night?" Jim asked Mary one day. "Our neighbors for miles around will be there."

"That sounds like fun," Mary accepted. "Good," said Jim. "We'll take one of the buckboards."

"Are they neighbors of yours?" Mary wanted to know.

"Are who neighbors?" Jim asked.

"Why, the Buckboards," Mary answered.

WHAT WAS JIM TALKING ABOUT?

Ans. A buckboard is an open fourwheeled carriage that is pulled by horses. A buckboard was used for transportation in the early days.

Old Timer

Old Timer, his evening chores done, sat on the stoop of the bunkhouse playing a lonesome little tune on a rusty harmonica. As he played he made up in his head words to go along with the tune. Old Timer was homesick as his song shows:

"I've been 'round these parts long, long enough, now. One day soon I'm fixin' to saddle up Old Paint and I'm a-goin' to head back home. Back where I used to fish the old Missouri. Back to the state where the Missouri River starts."

WAS OLD TIMER FIXIN' TO HEAD FOR MISSOURI WITH OLD PAINT?

Ans. Old Timer was going to Montana where the Missouri River starts.

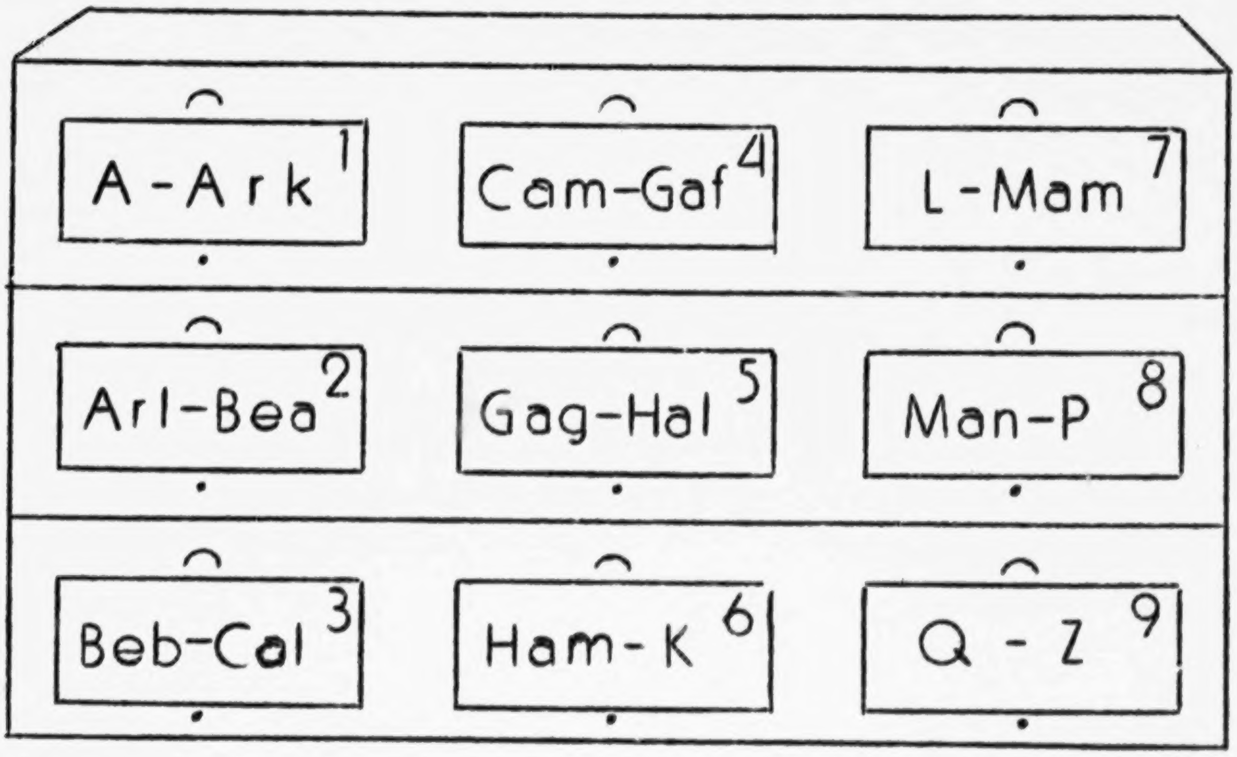
T5 - R - 6

Reference: Children's Book on How to Use Books and Libraries, chapters 12, 13, and 14

USING "OUTSIDE GUIDES" OF THE CATALOG

By using the "outside guides" from the illustration below, write the number of the drawer in which each of the following author, subject, and title cards may be found. Write your answers on another piece of paper.

1. Drawer Number 6 In Old California (Title)
2. Drawer Number 3 Elsa Beskow (Author)
3. Drawer Number 3 Bees (Subject)
4. Drawer Number 7 Little World Children (Title)
5. Drawer Number 9 The Story of Doctor Dolittle (Title)
6. Drawer Number 7 Abraham Lincoln (Subject)
7. Drawer Number 6 V. M. Hillyer (Author)
8. Drawer Number 8 Nixie Bunny in Manners Land (Title)
9. Drawer Number 4 An Engine's Story (Title)
10. Drawer Number 9 George Washington (Subject)
11. Drawer Number 8 James Otis (Author)
12. Drawer Number 7 Log Cabin Days (Title)



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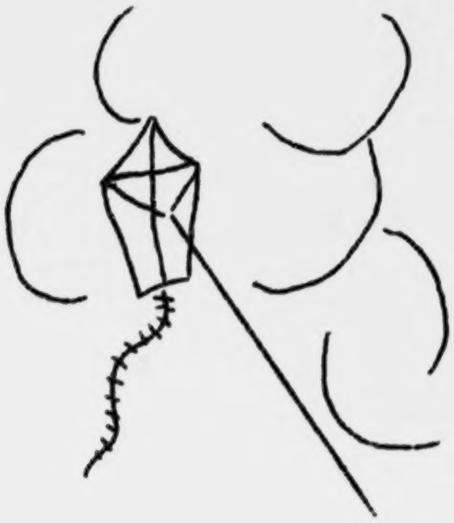
T5 - R - 7

FINDING THE RIGHT MEANING OF A WORD FROM THE DICTIONARY



Kites

Use the dictionary to find one word which may be used in the place of the underlined word in each sentence below. For each word be sure that you read all the meanings given in the dictionary to find the right word to fit the meaning of the word in the sentence. Write your answers on another piece of paper.

1. The compact we have is to do our best on this lesson. agreement
2. She put her clothes into the suitcase in the most compact way. condense
3. What is the name of the company for which he works? firm
4. We had company for dinner. guests
5. The rough weather caused the boat to list. tilt
6. The kind old German lady gave the boy a mark to use as he wished. money
7. Robin Hood could always hit the mark. target
8. How many knots an hour can the fastest boat make? miles
9. John brought in the mail that the postman delivered. letters
10. The knight put on his coat of mail. armor

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TAKING NOTES

Turn to the chapter "The 'John Newbery Medal' Books" on page 105 of *The Children's Book on How to Use Books and Libraries* and complete the following outline. Write your answers on another piece of paper.

I. Worthwhile children's books tell of

- A. fairies
- B. animals
- C. history
- D. adventure
- E. aviation
- F. lives of great people
- G. poetry
- H. customs
- I. art
- J. music

II. Frederick Melcher's work

- A. Started plan of Children's Book Week
- B. Started "John Newbery Medal" prize.

III. "John Newbery Medal"

- A. Named for John Newbery
- B. Awarded once a year

IV. Awards

- A. First, in 1922, van Loon, *The Story of Mankind*
- B. Latest, in 1959, Speare, *The Witch of Blackbird Pond*

T5 - R - 9

DO WORDS ALWAYS MEAN WHAT THEY SAY?

Write your answers on another piece of paper.

1. The cat *kept an eye on* the dog in the yard.

   put his eye against

   observed closely

2. He was always willing to give anybody *a piece of his mind*.

   a piece out of his head

   scolding advice

3. From snout to tail, the old fox *was a picture of despair*.

   had his picture taken in despair

   looked hopeless

4. He *fell into a deep slumber* and soon was snoring very loudly.

   flopped into bed

   began to sleep soundly

5. He missed his train and had nothing to do for an hour but sit in the station and *twirl his thumbs*.

   wait impatiently

   spin his thumbs

6. The boy's large ears *were a sore point with him.*

   caused him to feel unhappy

   were full of pain

7. When he tried to work the lever, *his fingers were all thumbs*.

   he had only thumbs on his hands

   he was awkward

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T5 - S - 1

Fresno City Unified School District

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SCIENCE

References: How and Why Series--Books 5 and 6
Wonderworld of Science--Books 5 and 6

Write you answers on another piece of paper.

1. A high pressure area will move toward a low pressure area. ([✓ True]) (False)
2. "Highs" are areas of fair weather. ([✓ True]) (False)
3. Fog is considered to be precipitation. (True) ([✓ False])
4. Dew is not precipitation. ([✓ True]) (False)
5. In a high pressure area the winds blow away from the center of the area. ([✓ True]) (False)
6. In a low pressure area the winds blow toward the center of the area. ([✓ True]) (False)
7. Cyclones are more dangerous than tornadoes. (True) ([✓ False])
8. Typhoons occur in the Pacific. ([✓ True]) (False)
9. Hurricanes occur in the Atlantic. ([✓ True]) (False)
10. The moon holds water. (True) ([✓ False])
11. Thicker coats on animals would indicate that the coming winter will be colder. (True) ([✓ False])
12. The sun draws water. (True) ([✓ False])
13. The approximate temperature can be determined by counting the chirps of a cricket and doing some simple addition. ([✓ True]) (False)
14. Oceans heat more rapidly than land. (True) ([✓ False])
15. A low pressure area usually means stormy weather. ([✓ True]) (False)
16. The main headquarters for the Weather Bureau is in Sacramento. (True) ([✓ False])
17. Winds in the United States usually blow in an easterly direction. ([✓ True]) (False)
18. A wind blowing 40-60 miles per hour is called a breeze. (True) ([✓ False])
19. A cumulus cloud usually brings rain. (True) ([✓ False])
20. A barometer measures temperature. (True) ([✓ False])

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T5 - S - 2

SCIENCE QUESTIONS STRESSING TERMINOLOGY

References: How and Why Series--Books 5 and 6
Wonderworld of Science--Books 5 and 6

1. A thermometer measures temperature.
2. A weather vane measures wind direction.
3. A barometer measures air pressure.
4. A anemometer measures wind speed.
5. A dark cloud bringing rain or snow is called a nimbus cloud.
6. The cumulus cloud is a fluffy, fair-weather cloud.
7. The cirrus cloud means probable fair weather for 24 hours.
8. Grey layers of clouds which mean rain is almost sure to come are called stratus clouds.
9. A wind 40-60 miles per hour is called a gale.
10. A wind 60 miles per hour and up is called a hurricane or typhoon.
11. Sleet is frozen rain.
12. Hail is rain thrown up into cold air by a rush of warm air where it is frozen.
13. The dividing line between two masses of air is called a front.
14. Cold air is heavier than warm air.
15. Climate is the average weather of an area or country.
16. Rain, sleet, hail and snow are all forms of precipitation.
17. Cyclones or Anti are winds that whirl in a very large radius.
18. Tornadoes are whirling winds that cause much damage.
19. Hurricanes or typhoons are violent, straight winds that cause much damage.
20. Frost might be called a frozen dew.

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PLANETS

(Science)

Write your answers on another piece of paper.

1. How fast does light travel? Ans. 186,000 miles per second

2. At the above rate, how far would light travel in a year?

   Ans. 6,000,000,000,000 miles

3. How far is the sun from the earth? Ans. 93,000,000 miles

4. At 186,000 miles per second how long does it take the sun's light to reach the earth? Ans. 8 minutes

5. How fast is the earth moving through space? Ans. 12 miles per second

6. How many miles does the earth travel in its orbit around the sun?

   Ans. 595,000,000 miles

7. Why is the sun a star? Ans. It burns of itself.

8. Many planets were named after gods. Identify these.

   A. Speed Mercury

   B. King of Gods Jupiter

   C. Underworld Pluto

   D. Beauty Venus

   E. War Mars

   F. Sea Neptune

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SCIENCE

Write your answers on another piece of paper.

1. There is a rock that is a food substance. Which rock is it?

   Ans. rock salt

2. What are the precious metals?

   Ans. gold, silver, and platinum

3. What does karat in jewelry mean?

   Ans. The karat mark refers to the fineness of gold jewelry.
   24 karat = pure gold
   12 karat = $\frac{1}{2}$ gold, $\frac{1}{2}$ alloy

4. What does sterling silver mean?

   Ans. silver contents 92.5%
   remaining 7.5% copper

5. Which of the precious metals have been used in counterfeiting?

   Ans. platinum
   platinum and then plated with gold

6. What is the difference between karat and carat?

   Ans. karat = purity of gold alloys
   carat = expresses weight of gem

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T5 - S - 5

A QUIZ ABOUT WHERE ANIMALS LIVE

(Science)

"Where Do They Live?"

Here are 20 animals. Can you name the native habitat of each one?

Three choices are given for each question. Only one of the three is correct. Choose the right answers. Write them on another piece of paper.

1. The duckbilled platypus lives in: Africa Brazil Australia
2. The sloth lives in: Europe South America South Africa
3. The giraffe lives in: Burma Africa Australia
4. The gila monster lives in: United States French West Africa Asia
5. The reindeer lives in: Lapland Anarctic Ecuador
6. The lemur lives in: South America Australia Madagascar
7. The hippopotamus lives in: Iran Africa Norway
8. The rhinoceros lives in: India Argentina New Zealand
9. The giant armadillo lives in: U.S.A. South America Italy
10. The orangutan lives in: Indonesia Africa Syria
11. The koala "boar" lives in: Australia India China
12. The anteater lives in: Egypt South America Hawaii
13. The elephant lives in: Africa Turkey Chile
14. The two-humped camel lives in: Arabia North America Central America
15. The musk-ox lives in: Canada Russia Chile
16. The gorilla lives in: Burma African Congo Spain
17. The bison lives in: Argentina Alaska United States
18. The tiger lives in: Africa Europe India
19. The giant panda lives in: Samoa China Venezuela
20. The zebra lives in: Africa Madagascar Borneo

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*WHY
- do leaves turn in the fall?
- can you skate on ice?
- does water run off a duck's back?

ANSWERS for WHY

1. b) Blowing puts out a match flame because the burst of air blows the flame away from the match stick. This is the same as taking the supply of fuel away from the fire. This is what makes the match go out--though there undoubtedly is some cooling off as well.

2. b) Soap helps clean things by emulsifying oil and grease. Ordinarily, oil and water do not mix unless the oil can be emulsified. This means that the molecules of oil will not combine with water molecules unless there is another molecule of a special sort in between. Soap molecules do this very well. Soap also breaks the surface tension of the water to make it "wetter."

3. b) Potatoes are cooked before they are eaten because--unlike carrots or radishes--food in the potato is held inside tiny cells that have walls; these walls cannot be digested by humans. Cooking swells the cell material so the walls break, making the nourishment available. If you eat raw potatoes, you can get food value only from those cells you happened to crush with your teeth.

4. c) Simply opening the refrigerator door won't air-condition the kitchen as the heat then would have no place to go. Heat removed from the food inside the box is pumped out into the room again--by way of coils at the back or bottom. An air conditioner pumps the heat from the room to the outside.

5. a) Your feet feel warmer because the bathmat is a good insulator--it absorbs little heat from your feet. The floor is a better conductor. It takes heat away, making your feet feel cold.

6. b) Wool is warmer than cotton because wool fibers contain tiny air pockets and also are crinkled and matted together. The trapped air holds the heat. Cotton has a more or less straight fiber without air pockets, and therefore does not insulate as well.

7. a) Water becomes "flat" if left standing in a glass because much of the air mixed in the water comes out of solution. This often can be seen as tiny bubbles on the sides of the glass. When the air escapes, the water tastes "flat."

8. c) The pressure of skates on ice makes a thin, slippery film of water. This makes skating on ice possible. When your skate moves along, the pressure is released and the film of water freezes again.

9. a) A pressure-cooker gets hotter--and therefore cooks more quickly--because the boiling point is considerably higher for water under pressure. Water normally boils at 212 degrees, but temperatures in a pressure cooker can be as high as 300 degrees. This higher heat cooks foods a good deal faster without burning them.

10. b) Leaves turn color in the fall because they die from lack of food. Supply lines in the leaf stem are shut off in the fall by the growth of certain cells that cut off the green chlorophyll and allow the yellows and reds that were in the leaf all the time to be seen. In addition, some new substances are formed at this stage that may show up as deep reds and purples.

11. c) Water runs off a duck's back because of a waterproof coating of oil. The duck preens its feathers with this oil, which comes from a gland on its back, near the tail. Without this oil, the feathers of water fowl would become water-logged and they would not be able to stay afloat.

*by Don Herbert NBC-TV's "Mr. Wizard"
taken from Parade--September 27, 1959

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AROUND THE WORLD

Some Geographical Gems

Here are places for you to locate. If you get 14, that's satisfactory, score of 16 is good, 18 to 20 is excellent. Write your answers on another piece of paper.

		Location	Longitude and Latitude
1.	Where is Ellis Island?	New York	48W. 88N.
2.	Where is Dixie?	Southern U.S.	88W. 48N.
3.	Where is the Statue of Liberty?	N.Y. Harbor	40W. 88N.
4.	Where is the Rock of Gibraltar?	Mouth of Med. Sea	6W. 36N.
5.	Where is the Emerald Isle?	Ireland	8W. 50N.
6.	Where is the largest state in the Union? . . .	Alaska	150W. 68N.
7.	Where is the smallest state in the Union? . .	Rhode Island	71W. 42N.
8.	Where is the city that uses canals as streets?	Venice	7E. 45N.
9.	Where is the largest source of ivory?	Africa	15E. 15N.
10.	Where is the Windy City?	Chicago	87W. 42N.
11.	Where is the Cape of Good Hope?	South Africa	15E. 15N.
12.	Where is the Bay of Bengal?	India	78E. 20N.
13.	Where is the Sphinx?	Egypt	30E. 30N.
14.	Where is the Coliseum?	Rome	15E. 42N.
15.	Where is the Gobi Desert?	N. E. Asia	110E. 5S.
16.	Where is Borneo?	South of Asia	110E. 5N.
17.	Where was Christopher Columbus born?	Genoa, Italy	8E. 15S.
18.	Where are the biggest diamond mines?	South Africa	15E. 15S.
19.	Where are the Hawaiian Islands? (Long. & Lat.)	S. Pacific Ocean	20E. 160N.
20.	Where are the Alps?.	Switzerland	2E. 75N.

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T5 - SS - 2

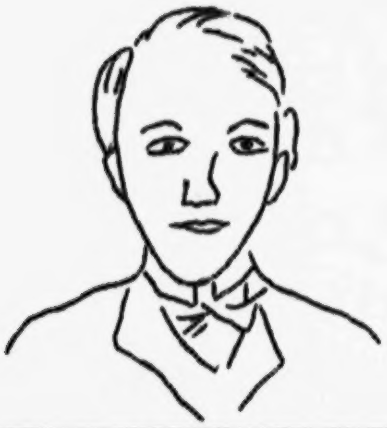
FAMOUS INVENTORS

Can You Recognize Them?

The four men shown have benefited our civilization with their inventions. Do you know who they are?

Under each picture you will see the dates that tell you when each man lived. Below this is a row of boxes to show how many letters there are in his name. There are three well-known facts about the man given below each. You may use research materials. When you have finished, write a report on one of your choice.

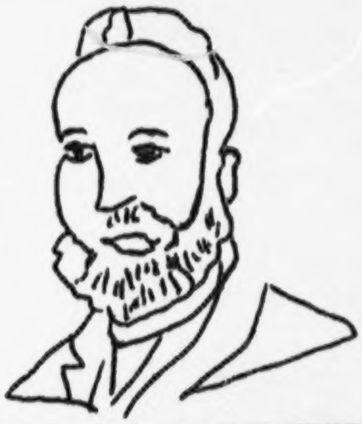
Write your answers on another piece of paper.



1847-1931

E	D	I	S	O	N

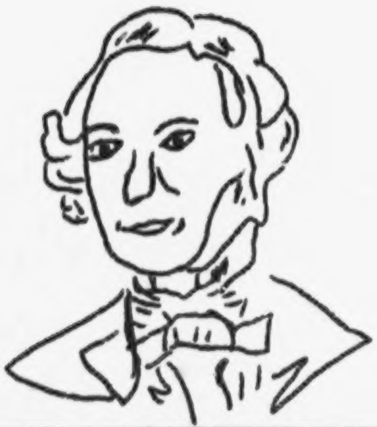
1. He invented the electric light.
2. He invented the phonograph.
3. He was known as the "Wizard of Menlo Park."



1847-1922

B	E	L	L

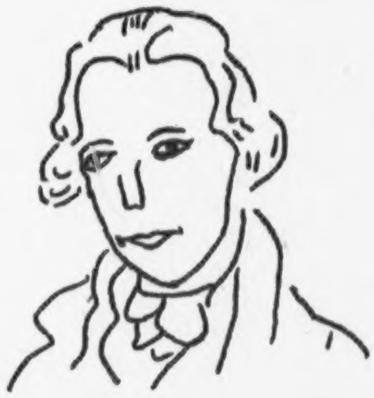
1. He invented the telephone.
2. He spent much of his life teaching deaf people.
3. He was born in Scotland.



1791-1872

M	O	R	S	E

1. He invented the telegraph.
2. The code signals used in telegraphy are named after him.
3. He was a painter as well as an inventor.



1736-1819

W	A	T	T

1. He was a Scotish inventor.
2. He invented the steam engine.
3. A unit of electrical power was named after him.

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T5 - SS - 3

WHICH CAME FIRST?

Write your answers on another piece of paper.

1. ___Mayflower_x_Viking Ships___Santa Maria
2. _x_Leif Ericson___Ponce de Leon___Columbus
3. ___Plymouth_x_Jamestown___Georgia
4. _x_Captain John Smith___James Oglethorpe___Roger Williams
5. ___Anne Hutchison_x_Pocahontas___Sacagawea
6. ___Lewis and Clark___Marquette and Joliet_x_Eric the Red
7. ___First President_x_Boston Tea Party___Revolutionary War
8. _x_George Washington___Abraham Lincoln___Thomas Jefferson
9. ___Declaration of Independence___The Constitution_x_Stamp Tax
10. ___John Hancock_x_Peter Stuyvesant___Robert Fulton
11. _x_Miles Standish___Daniel Boone___Buffalo Bill
12. ___Flatboat_x_Canoe___Steamer
13. ___Train_x_Stagecoach___Bus
14. ___Wright Brothers___General Dodge_x_Robert Fulton
15. _x_Covered Wagon___Pony Express___Train
16. ___California_x_Louisiana Territory___Northwest Territory
17. ___Missouri River_x_Ohio River___Mississippi River
    (To the Pioneers Going West)
18. ___William Penn___Benjamin Franklin_x_De Soto
19. _x_Massachusetts___Ohio___California
20. _x_English People___Spanish People___Dutch People
    (To the New World)
21. ___St. Louis_x_Williamsburg___New York City
22. _x_Tepees___Brick Homes___Log Cabins
23. ___Central Pacific Railroad___Eric Canal_x_Santa Fe Trail
24. ___The National Road_x_Boone's Wilderness Road___California Trail
25. _x_Coronado's Search for the Seven Golden Cities of Gibola
    ___California Gold Rush___Uranium Rush

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T5 - SS - 4

EXPLORERS

(Social Studies)

Write your answers on another piece of paper

1. Name the seven continents.

a. North America

b. South America

c. Europe

d. Asia

e. Africa

f. Australia

g. Antarctica

2. Name the five oceans.

a. Atlantic

b. Pacific

c. Indian

d. Arctic

e. Antarctic

3. Name three explorers from each country.

Spain	France	England
a. De Sota	a. Cartier	a. John Cabot
b. Columbus	b. Champlain	b. Sir Francis Drake
c. Magellan	c. Marquette	c. Henry Judson

4. Match the explorer with the deed he accomplished.

Columbus Discovered America

Balboa Discovered Pacific Ocean

Amerigo Vespucci America named for him

Magellan First man to sail around the world

De Soto Discovered the Mississippi River

Ponce de Leon Discovered Florida — He sought the fountain of youth

Marquette and Joliet Explored part of the Mississippi River

Cartier Discovered St. Lawrence River

Champlian Made French settlement in Canada at Quebec

Sir Francis Drake First Englishman to sail around the world

John Cabot Discovered North American continent

Henry Hudson Discovered Hudson and Hudson Bay

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SOCIAL STUDIES

Write your answers on another piece of paper.

1. What Revolutionary War hero was called the "Swamp Fox?"

   Ans. Francis Marion was called the "Swamp Fox." Compton's Pictured Encyclopedia

2. What was the origin of the name America?

   Ans. A man named Amerigo Vespucci was the origin of the name America. Compton's Pictured Encyclopedia

3. What was the name of the flagship on which Columbus sailed across the Atlantic Ocean?

   Ans. The flagship on which Columbus sailed was the Santa Maria. Compton's Pictured Encyclopedia

4. Which pioneers in Kentucky were called "Long Hunters?"

   Ans. In 1769 backwoodsmen from the Yadkin District in North Carolina led by Daniel Boone came looking for land. They stayed so long that Kentuckians were often called "Long Hunters." Compton's Pictured Encyclopedia

5. Which one of the Great Lakes lies entirely within the United States?

   Ans. Lake Michigan lies entirely in the United States. Golden Book Enclyclopedia

6. Why did the Oregon Trail become the chief route to the Northwest in pioneer days?

   Ans. It was the chief route because it had a lot of water, easy fording, pasturage, and low passes through the mountains. Compton's Pictured Enclyclopedia

7. How many days did it take the "Mayflower" to reach America in 1620?

   Ans. It took the "Mayflower" approximately 68 days to reach America. Golden Book Encyclopedia

8. What is the United States"Bill of Rights?"

   Ans. The Bill of Rights is a document that describes the rights and freedoms of the people. World Book Encyclopedia

T5 - SS - 6

EXPLORERS

(Social Studies)

Here are the chief achievements of some not so common explorers. Can you name them? Write your answers on another piece of paper.

1. Robert Gray led voyages around world--discovered Columbia River, 1787.

2. Antonio Pigafetta accompanied Magellan--completed voyage after Magellan's death--kept famous journal.

3. Abel Janszoon Tasman discovered Tasmania and New Zealand.

4. Sir Samuel White Baker discovered Lake Albert.

5. David Livingstone greatest of African explorers--discovered source of Zambezi River, 1841.

6. Sir Henry Stanley proved the correct source of Nile--discovered the "Mountains of the Moon."

7. Fridtjof Nansen first to explore ice fields of Greenland.

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PARALLELS, MERIDIANS, DIRECTION, AND LOCATION

The material below is made up of complete and incomplete statements. As you read the material, try to fill in the words that are missing. Remember to make use of maps, the globe, and any facts that you collect as you read.

Parallels are the lines that run in the same direction as the equator--east and west.

Write your answers on another piece of paper.

1. The longest parallel falls on the equator.

Meridians are the lines that run crosswise to the parallels; meridians run north and south. Meridians do not run parallel with one another.

2. Meridians come together (converge) at the North Pole and the South Pole.

3. To review: The equator runs in the same direction as the parallels.

4. The equator and the parallels run east and west.

5. Meridians do not run in the same direction as parallels, but run north and south.

6. Meridians do not run parallel with one another.

7. Meridians converge at the poles.

The North Pole and the South Pole are located on the earth's axis.

8. If a person goes true north from any point on the earth's surface, he will end up at the North Pole.

9. If a person goes true south from any point on the earth's surface, he will end up at the South Pole.

The Magnetic North Pole is the direction to which a magnetic needle or compass points.

10. The Magnetic North Pole is located on or near the continent of North America.

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MAPS AND GLOBES

Write your answers on another piece of paper.

1. From the point where the International Date Line meets the equator, if you go east, you again will find the continent of

   South America.

2. After passing South America, if you continue east, you again will find the continent of Africa.

3. After passing Africa and the island of Madagascar, just off the coast of Africa, if you continue east, you will find the continent of

   Australia.

4. Now, we have found three of the seven continents--South America, Africa, and Australia. Next, can you find the continent upon which you live. You live in the United States which is a part of the continent called

   North America.

5. East of North America is the continent of Europe. Adjoining Europe and to the east is the continent of Asia.

6. Now we have found six of the seven continents. We have found, South America, Africa, Australia, North America, Europe and Asia. This leaves only one continent to find. This continent is located right at the South Pole. This continent is called

   Antarctica.

7. The closest continent to the continent of Antarctica is

   South America.

8. The continent next closest is Australia.

9. Again, let's find the United States, the country in which we live. The country that is our neighbor to the north is Canada.

10. The country that is our neighbor to the south is Mexico.

11. Our country, as well as Canada and Mexico is a part of the continent called North America.

12. The United States has two states that are not attached to the main body of states. These two states are Alaska and Hawaii.

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OCEANS AND CONTINENTS

There are four oceans in the world. They are called the Pacific Ocean, Atlantic Ocean, Indian Ocean and the Arctic Ocean.

Write your answers on another piece of paper.

1. The Pacific Ocean is bounded by five continents. Those continents are:

    a. North America
    b. South America
    c. Antarctica
    d. Asia
    e. Australia

2. The Atlantic Ocean is bounded by five continents. Those continents are:

    a. North America
    b. South America
    c. Antarctica
    d. Africa
    e. Europe

3. The Indian Ocean is bounded by four continents. Those continents are:

    a. Africa
    b. Asia
    c. Australia
    d. Antarctica

4. The Arctic Ocean is bounded by three continents. Those continents are:

    a. North America
    b. Asia
    c. Europe

5. What fraction of the earth is water?

    three-fourths

6. What is the earth's circumference?

    25,000 miles

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